NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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SEASONABLE SUGGESTIONS.

AUGUST, an observing writer says, "is that debateable ground of the year, which is situated exactly upon the confines of Summer and Autumn; and it is difficult to say which has the better claim to it. It is dressed in half the flowers of the one, and half the fruits of the other; and it has a sky and temperature all its own, and which vie in beauty with those of the Spring." August is the old age of Summer—but beautiful in its age, and unlike any other month. Along with it comes new tones of the insect world, both by night and day. New hues invest the plants, as the almost unvarying green has changed to a still richer and more conspicuous gold color, contrasted with the leaves of green with which it everywere lies in contact. The sickle has been, or now is, busy with many of the plants which have come to perfection, and the golden sheaves have been borne away. Summer is rapidly waning, as every sight and sound declares. The pressure of the hay harvest is over, though meadows and second-crops are still behind to swell the value of this important product.

If July has been a dry month, August will present a good time to construct water-cisterns, with which every farm establishment should be provided in a conveniently located place. If the farm buildings are numerous and compactly situated, a small expenditure will suffice for the construction of all the apparatus necessary for conducting the water from the roofs into the reservoir, which, for greater convenience, should be located in some place where it may subserve the wants of the animals occupying the yards in winter, as well as the household. The convenience and value of such an arrangement will be particularly obvious during seasons of protracted drougth, or accidents from fire.

Good and substantial reservoirs—perfectly water tight, have been formed of split stone, brick, and even plank, the interior surface, as well as the bottom, being coated with cement. But they may be made without the use of either of these materials, by laying the cement directly on the surrounding earth. These cisterns should be "decked over," and made perfectly tight, and furnished with efficient pumps. The expense, contrasted with the advantage, is small, and as they last for many years, no one who studies his own convenience and the comfort of his stock—to say nothing of the security of his property and his family—will be disposed to consider capital invested in this way, otherwise than judiciously and profitably laid out.

During this month, the strawberry beds will require some care, if we wish to find them in a condition next spring to produce a liberal crop. It is not only necessary to keep them free from weeds and the ground in a well cultivated condition, but if the month be a dry one, they should be liberally watered once or twice a week, and the *runners carefully cut away*. If the runners are allowed to spread as they please, they will cover the ground, and in the spring your bed will probably present such a mass of weeds and plants as to defy all your patience to set them right again. Many a patch has been abandoned in despair when found in this condition.

Young trees that were budded last year must be attended to, and kept clean and well cultivated, and the numerous shoots that spring out from the main stem carefully cut away, allowing the vigor of the tree to go to the young scion. This, however, must be attended to at an earlier date, as well as in August.

One other suggestion for August, and we will leave the reader to seek his fields and crops. Many persons complain that their hens will not lay, and that notwithstanding their assiduity in furnishing them with all the articles ordinarily recommended to ensure fecundity, the eggs they produce will not "half pay the expenses." Now we presume there is *something* lacking, or the fowls would certainly not run their owners in debt. It is not generally understood even by those who *profess* to be the most deeply versed in the mysteries of 'Henology," that the hen, being omnivorous, requires, to ensure fecundity, a very liberal allowance of *meat!* When enjoying her liberty in the fields, pastures, or door-yards, the principal part of her sustenance is derived from insects, worms, &c. She partakes but sparingly, at such times, of grain, and often when that article is supplied, leaves it for the more inviting food which nature supplies her with, in her favorite haunts. Now if we confine her where the natural propensity for this description of food cannot be gratified, even though we supply the best of grain, and in abundance, she ill cease to lay. The privation affects her health, and there will necessarily be an end of *profit*, until the deficiency is supplied. When fresh meat or fresh fish cannot be obtained, the common scraps of the butcher, which are hard and compact, and can be kept any length of time, answer all the desired purpose.

Difference in Cows.—Cows under certain constitutional circumstances, are naturally disposed to convert their food into fat; so much so that there is great difficulty in keeping some individuals in a breeding state, and more especially the improved Short-horns, Devons, and Herefords. Turn a cow of this description into rich grass, and she is soon useless for anything but the shambles. The quality of the milk she gives may be fine but the quantity almost nothing. We have had a Devon, the property of a noble duke, which carried off the first prize in her class at one of the Royal Agricultural Society's meetings, not giving more than a quart at milking.

On the other hand, there is another class of cows naturally disposed to turn all their food into the pail. Turn a cow of this kind into rich grass along with the one above, and she will rather get poorer every day, if the milk is taken from her; while her plump and sleek rival is gaining weight. The former will consume greatly more grass and water than the latter, returning for it, in proportion, a still greater quantity of milk, but inferior in quality. In town dairies, when fed on sour grains, distillers' wash, &c., the quantity sometimes yielded is almost incredible. When such is the case, however, life is generally short, especially if cows are in a low state at calving. Hence the reason why dairymen purchase near-calves of this class in good condition.

The above two classes may be called extremes between which there is a mean—cows which if turned into a rich field of grass along with the other, would keep themselves in good condition and give a medium quantity of milk, the quality depending upon the richness of the food.—*Mark Lane Express.*

For the New England Farmer.

HUBBARD SQUASH—POTATOES.

Mr. Editor:—The subscriber would like to obtain a few seeds of the "Hubbard" squash, recommended in the last *Farmer* by "J. J. H. G." As the name and address are wanting, there seems to be no way of communicating with him except through you. If you can put me in the way to obtain them, you will confer a great favor.

It still seems to be a mooted question, whether different varieties of potatoes will mix, when planted side by side. Mr. French, in his article in the *Farmer* for June, thinks they will not; Mr. Joseph Blake thinks they will, and bases his opinion upon the fact that the product of Jenny Linds or Californias, of a red color, planted near Carters, were white. If his Carters had turned red, he might have had some plausible ground for his opinion to stand upon. Does Mr. Blake know the fact that colored potatoes "sport?" That Pink-eyes will occasionally be entirely colored, with no white on them? That Merinos, Peach-blows, Californias (the latter especially,) and other colored potatoes, are often partly, and sometimes entirely white? I have raised, within the last five years, hundreds of varieties of the potato, and have found no mixing of the roots from planting side by side, and no change of varieties produced in that way; though I have produced new varieties by sowing the true seed (from the balls;) and agree with Mr. French, that they will mix in no other way.

Robert D. Weeks.

Bowen's Prairie, Iowa, June 24, 1856.

Remarks.—If correspondents would put their names to their communications, it would save us some labor and accommodate others.

TAME FISHES.

The last efficient sea-fish pond we chanced to examine is situated near Port Nesson, in Wigtownshire. It was constructed in 1800. A flight of steps leads downward to a small platform, by the water's edge, and the moment the old woman, who was our conductress, showed herself in the act of descending those steps, the whole body of codfish moved toward her, just as a flock of poultry follow a henwife. She had in her had a basin filled with sand-eels and limpets; and when we neared the surface of the pond, and were seen by the fish to be manipulating the contents of the basin, as many as could press themselves close in shore raised their heads, or at least the anterior portion, quite out of the water, opened their mouths wide, and made a gurgling and occasionally a snapping sound, the latter occasioned by the sudden shutting of their jaws, when they felt or fancied that something had dropped between them.

As we stood on the lowest step, *au niveau* of the surface of the water, some of them laid their large languishing faces over our feet, allowed us to put our hands beneath them, and roll them over, or even raise and replunge them—as nurses do children—out of, and then beneath their native brine.

The species were chiefly cod, with a few lithe, a gurnard, and a small grilse, or sea-trout.

We were considerably affected by the tenderness of feeling which seemed to exist between most of these fishes and their ancient feeder. They had entire confidence in each other, and this was, no doubt, the foundation of their mutual respect and happiness, as it is that of all the domestic affection. Tame fish are now quite out of fashion, although we hope that their recent introduction into the vivaria of our zoological gardens may revive the taste. We may add that fish are great favorites in Otaheite. Mr. Ellis informs us that he has frequently accompanied a young chieftain to the side of a hole. So soon as a whistle was sounded, an enormous eel would show itself upon the surface, where it fed fondly and familiarly from its master's hand.—*Blackwood.*

For the New England Farmer.

ON BEES.

Mr. Editor:—For a few years past I have been happy to observe that in this community there is a growing interest in the raising of *honey* and the domestication of the honey bee, and what has surprised me most is, that so little is said in the agricultural papers and various reports, on this interesting branch of farm economy. In the different Patent Office reports, with one or two exceptions, nothing whatever is said on the subject. In that of 1845 there may be found a short article. What I would like to see is, a series of short, practically written articles on the management of the honey bee. Will not some one of the thousand readers of the *New England Farmer* take this matter in hand and give us the desired information?

Until this spring I had never hardly given a moment's thought to these industrious "little fellows," who, by their industry, economy, contentment and system, put most of us to shame. My first business after receiving my colony, was to make myself as fully acquainted with their history and habits as reading different treatises on the subject could do. But I have not yet been able to procure such a work as I think the novice, like myself, wants. There is no lack of *books*, and some of them, I should judge, safe ones to follow, but out of four different works which I have lately procured, and carefully read, neither of them come up to my ideas of what such a work should be. Instead of a treatise on bees and their management, they are rather a book advertisement of some particular patent hive, and the instructions given are for the use of the hive, and not for the management of the bees, as adapted to such a hive as any common farmer with ordinary ingenuity can construct. All the writers agree that the honey bee can be easily managed, and made profitable, by proper care.—Without intending any disparagement of others, those which come the nearest to what such a work ought to be, I may mention Dr. Eddy's and Mr. Weeks's, yet each was written to promote the sale, probably, of a particular kind of hive. This subject must be a very interesting one to those fully initiated into its mysteries. There are many such no doubt, who read the *New England Farmer*, from week to week. Let me say to such, give us the desired information through the medium of the *New England Farmer*, without any reference to any thing more than the old-fashioned hive, and I, for one, will hold the writer in ever grateful remembrance. On the management of the honey bee, as adapted to the common box hive, who will give us his experience? Norfolk.

June 10, 1856.

Remarks.—Persons writing upon bees, it is presumed, give the results of their experience, and that experience, now-a-days, is generally with other than the common box hive. Has the writer seen Langstroth's work on the honey bee, which is, perhaps, the most perfect system promulgated. We have had a good deal of experience with bees and hives, and would not any longer use the common box. Eddy's and Weeks's we have not tried. We find nearly every conceiveable convenience in Langstroth's.

For the New England Farmer.

WHEAT ON THE POTOMAC LANDS.

Mr. Editor:—I must be allowed to embrace an occasion to express my entire satisfaction with your useful, interesting and cheap publication, one of great value to every farmer, and especially in New England. No money can the tiller of the soil invest to more advantage.

As I am a farmer, near the Potomac River, on Nanjemoy Creek, in Charles County, I avail myself of the occasion to make a statement to show what our lowlands, in the low counties of Maryland can do. Last year my field of wheat, less than 250 acres, following a corn crop on the same land, produced 3650 bu. of good marketable wheat, 58 lbs. to the bushel, which I sold during the autumn, before the rise of prices, for $1,92 per bushel. My overseer, a truthful man, in whom I have confidence, has furnished me what he calls "a plot of the piece of land on which the 84 bushels of wheat were made the last season." About one-third of the wheat on the piece fell down in a bloom state, where I consider the yield was not more than half in consequence.

I used guano to advantage on about a third of my wheat field; but not on the 1¾ acre lot that made the most productive yield. It had been for many years a peach orchard. I can not pretend to say how many years it had been thrown out of cultivation; but certainly for more than twenty years, during which it has been a clover lot, but rarely if ever grazed. No manure has been put upon this plot for many years. Respectfully,

Benjamin Ogle Tayloe.

Washington, D. C., June, 1856.

N. B. This year my plantation will not produce half a crop of wheat because of the unfavorable spring, that has been equally if not more destructive along the tide water counties of Maryland, Virginia, and probably as far as the Blue Ridge in Virginia.

☞ The income of Ohio, last year was about four and a quarter millions of dollars, and its expenditure three millions and a half. It has 800 miles of canals, 600 of navigable rivers, and 2000 miles of railroad. Its wheat crop last year was 30,000,000 bushels, and corn 80,000,000.

For the New England Farmer.

SCIENCE AND THE FARMER.

The farmer should understand geology. He should know the composition and structure of the rocks which constitute so large a part of the soil which he cultivates. He should know the nature of the rocks in all the region around him, and what kind of soil they will produce, when worn down by the action of the sun and rain and frost. If the mountains and hills that look down upon his farm contain marble or granite or slate or iron, he should know that these minerals, which have been upheaved from the bowels of the earth, are being annually spread over the valleys and plains that lie at their feet, by the drenching rains and melting snows which wash their declivities. He should know how to select those soils whose mineral composition is best suited to particular crops, and to determine when they contain mineral elements that unfit them for his purposes.

He should know what is a sandy loam, and what a clayey loam, and of what each consists. He should know what is an alluvial soil, and what mineral elements it contains in any given locality.—The farmer should understand the leading principles of chemistry in general, and all about those particular principles that are applicable to agriculture. The earth is not a mere dead mass of matter. It is a vast chemical laboratory, filled with various and strange materials, full of activity and motion, in which composition and decomposition and new combinations are constantly going on. To-day it receives accessions and influences from the heavens, to-morrow it throws off newly-formed elements, that are carried into the oceans, and deposited upon distant shores. The earth is almost a living creature, and when quickened by atmospheric influences, she brings forth innumerable living things, infinitely diversified in form, in hue and fragrance, and each derives from her bosom the nutriment that is suited to its character and wants; truly is she called the mother of all living things. The cultivator of the earth should surely know something of its nature, its elements, its affinities, and its diseases.

The farmer should be a botanist. This is the natural science of the agriculturist. Can he be content to spend his life in ignorance of the names and properties and distinguishing characteristics of the trees and shrubs and flowers that are so lavishly spread around him, painting his fields and woods with their thousand hues, and rendering this outward world a scene of beauty? And how does the seed germinate, and the tender leaf unfold itself? and in what order are the several parts of the flower developed? How is the blossom impregnated and the fruit formed? What will injure and what improve each plant? How may plants be improved by engrafting, by innoculation, by crossing? How may new varieties be obtained, and old ones be made better? Can the farmer be content to leave questions and such as these unanswered?

But vegetable physiology alone should not satisfy him. He has in his charge, and appropriated to his use, some of the noblest animals upon the earth. They are his companions through life, and by their labor, or the products of their bodies, contribute largely to his happiness and comfort. He should make himself acquainted with the structure and uses of their various organs. He should know how often their hearts beat, and how often they breathe in a state of health, that he may judge how far, at any time, they deviate from the healthy standard. He should know the absolute and relative position of all the organs, that he may the better determine the seat of disease, and with more certainty apply his remedies. He should know how the fat is deposited. How the bones are formed, and how the muscles; and what food or treatment will contribute to the most rapid growth of each; and then the knowledge of different races, and their curious histories, and their several peculiarities, are all highly important to the breeder of stock. The farmer should have a knowledge of the diseases of his animals, and of the proper remedies, and should be able to perform all the more common surgical operations. Many a fine animal has been slaughtered, because its owner could not set a bone, or bandage a wound.

The farmer should carefully observe the habits of animals, birds and insects. Who else has so good an opportunity as he to do this? He should especially study the habits and nature of the insects that are injurious to vegetation, that he may be the better able to defend his crops from their ravages. He can scarcely be expected to be familiar with the whole subject of entomology; but he should carefully study those insects that are found in his own neighborhood, and upon his own premises, and note with accuracy the result of his observations for the benefit of himself and his neighbors.

The farmer should understand the general principles of mechanics, and particularly those that relate to the structure and use of agricultural implements. In ancient times, no man was considered an accomplished plowman, until he could construct his own plow. In modern times, the division of labor, and the use of machinery has rendered this qualification unnecessary. But he should understand the true principle upon which the plow, and every other implement he uses, should be constructed, that he may discover any defects in their working, and be able to suggest any improvements which they need. He should be able to use tools in a workman like manner, and thus save many a blacksmith's and tool-maker's bill, which he would otherwise have to pay. He should make himself familiar with all these, and many other branches of scientific knowledge. The study of these subjects will be to him an unfailing source of pleasure, and cannot fail to improve and refine all his powers and sensibilities. There is no branch of knowledge that will not be serviceable to him. There is none from which he cannot derive some hint or some law that may be applicable to some one of his varied pursuits, and they will all tend to refine his feelings, to enlarge his intellect, and to elevate him in the scale of being; and there is scarcely a branch of physical science that may not be made to put money into his pocket, if this is the leading object which he is pursuing.

When our young farmers shall all be well instructed in the general principles of scientific knowledge, individuals among them will acquire and develop a taste for special scientific pursuits. One will become distinguished as a geologist, another as an agricultural chemist, a third will acquire fame as a botanist, and a fourth as an entomologist; a fifth will be distinguished as an inventor of agricultural implements. Another will obtain a fortune for himself, and confer inestimable

benefits upon his country, by the introduction of new varieties of plants and fruits, while another will devote himself to the introduction of new breeds of animals, or to the improvement of those already existing. If our farmers would become self-instructors, and study and think for themselves, no profession would be more honorable, or have more weight in society, or be more eagerly sought after by the active and intelligent of all classes.—Farming would cease to be mere drudgery, and those who pursue it, to be "of the earth, earthy." All farm operations would be based upon scientific knowledge. New principles, new processes, and important and valuable results would be brought out that would confer fame and fortune on their discoverers, and great benefits upon the human race. We should have farmers who would be known as the authors of valuable works, farmers who would achieve a high rank in intellectual improvement, which would fit them for the most honorable and dignified positions in society. R.

SEA WATER, AND A COTTON SHIRT!

Between sea-water and a cotton shirt there is a very close affinity; and yet, how few men who wear shirts made of cotton, and how few of their wives clothed in the same material, see the intimate relation that subsists between the various salts of the ocean and the great staple of the South? Most persons know that an oyster is nutritious food, and that it grows in salt water; but why this same oyster yields a manure worth ten or twenty times more than that of a pig fed on corn, of a like weight, how few understand? Fish are the food of birds whose excrements constitute commercial guano; and fish themselves have been used for indefinite ages to fertilize the ground cultivated by man. But 100 pounds of dung formed exclusively of fish, dry weight, is worth two or three hundred pounds of the same fish for manure before they were eaten by birds. This is an important fact, and one that points to the *why* guano is so valuable. Fish part with a large share of their carbon and elements of water in the systems of birds that digest them, so that four hundred pounds of fish, dry weight, yield only one hundred pounds of dry guano. The latter contains nearly all the nitrogen and phosphates, soda, lime and magnesia, which the fish possessed; while the combustible carbon and hydrogen in the fish were literally burnt in the bodies of the birds to keep them warm. In this way nature concentrates fertilizers, and thereby greatly facilitates their cheap and extensive distribution for agricultural purposes.—*Dr. Lee.*

THE HAMMER.—The hammer is the universal emblem of mechanics. With it are alike forged the sword of contention and the plowshare of peaceful agriculture. In ancient warfare, the hammer was a powerful weapon, independent of the place which it formed. The hammer is the wealth of nations. By it are forged the ponderous engine and the tiny needle. It is an instrument of the savage and the civilized. Its merry clink points out the abode of industry: it is a domestic ditty, presiding over the grandeur of the most wealthy and ambitious, as well as the humble and impoverished. Not a stick is shaped, not a house is raised, a ship floats, or a carriage rolls, a wheel spins, an engine moves, a press speaks, a viol sings, a spade delves, or a flag waves, without the hammer. Without the hammer, civilization would be unknown, and the human species only as defenceless brutes; but in skilful hands, directed by wisdom, it is an instrument of power, of greatness and of true glory.—*Farmer and Mechanic, Nashville, Tenn.*

For the New England Farmer.

PULVERIZED GRANITE AS A MANURE.

BY PROF. J. A. NASH.

MR. BROWN:—An excellent farmer from a neighboring town recently called on me to inquire whether granite, reduced to a powder, would not be a good fertilizer, by reason of the alkalies contained in it, especially in the felspar and mica.

His reasoning was, that wood ashes prove an excellent manure for nearly all soils in this region; and that falspar and mica contain the very ingredients to which we ascribe their benefit, in still larger proportions than ashes. I told him that experiments had been made with the fine dust of stone-yards, where granite only had been hammered, and that good results were said to have followed; but that I knew not how carefully the experiments had been made, I could not say how much was due to the granite dust, or how much to extraneous matters that might have accumulated with it.

He stated, that on his farm, and generally in that neighborhood, are large masses of granite, that could be spared as well as not, consisting largely of felspar and mica, with very little quartz; that it is of a crumbly nature, and could, in his opinion, be reduced to a fine powder at very little expense; and that he believed the value of it, as a fertilizer, would be equal to that of wood-ashes. He was desirous that attention should be called to the subject, and it is at his request that I write, hoping rather to elicit information on the subject, than to give it.

Granite differs greatly in its composition. Some specimens consist largely of quartz, which is nearly pure silica (flint sand,) and consequently would possess no value for ordinary soils. Others consist largely of felspar, known by the resemblance of its fracture to that of china ware. Mica (known sometimes as isinglass) is the third ingredient of granite. In some specimens, albite, which is a silicate of soda instead of potash, takes the place of felspar.—In others, hornblende, containing considerable amounts of lime and magnesia, takes the place of mica, as the Quincy granite, more properly termed sienite.

An average sample of granite might consist of something like two-fifths quartz, two-fifths felspar and one-fifth mica. According to Dana, (Muck Manual, page 50, fourth edition) felspar contains 67 per cent. of silica, 17½ of alumina, 12 of potash and 1½ of lime. This then is a silicate of alumina and potash, with a little lime. Gray mica, according to the same authority, contains 51 per cent. of silica, 21 of alumina and 10 of potash, showing it to be a silicate of alumina and potash without lime. He makes brown mica to contain 40 per cent. of silica, 22 per cent. of alumina, and 4½ per cent. of potash or soda.

According to these figures, were many samples of granite taken at random, and so mixed as to

produce an average, we might expect to find in a hundred pounds of the mixture, something like 75 pounds of silica, 12 pounds alumina, 6 pounds of potash, 1 or 2 pounds of soda, a little lime, oxide of iron and other unimportant matters. The last samples, such as our friend speaks of, consisting largely of felspar and mica, with only scattering grains of quartz, might be more than twice as rich in the alkalies. If so, they would contain, to the one hundred pounds, at least 12 pounds of alkali. It is manifest that the silica would possess no value, unless for amending clay or peat lands, and for that purpose it could be had at a cheaper rate, in the form of sand or gravel. The alumina would be of a little value for amending sandy soils provided there were no clay beds near, as 40 pounds of alumina are equal in retentive power to 100 pounds of clay, pure clay being a silicate of alumina, 40 pounds of the former to 60 of the latter. The principal value of the granite dust would be in the alkali, say from 6 to 12 pounds to 100 pounds of the crushed granite.

It should be considered that the potash spoken of above is not the carbonate of potash, such as can be procured for agricultural purposes at 7 or 8 cents a pound. It is nearly twice as valuable as carbonate, provided that it will operate as promptly. My impression is, that the potash, in the form in which it exists in crushed granite, will act surely, that the plants will gradually take it up, but not as promptly as when applied in the form of a carbonate, as in the potash of ammonia, or in unleached ashes. But it would seem that a bushel of crushed granite would contain quite as much alkali (if it were of the felspathic kind, more than twice as much) as a bushel of wood ashes. Could any inexpensive way of crushing it be devised? The Californians make out to crush a kind of quartz rock far harder than our granite, but perhaps they see more gold in the quartz than the farmer does in his crops; and we have heard that "money makes the mill go," or something like it. One thing is certain; if it should turn out that granite is a good manure, New England would have a right to be the richest country in the world. Let us hear from any who have tried it. Our mechanics would be glad to be constructing the mills to crush it, should it appear that they will be wanted. In cases where it has been applied with good effects, was it applied unmixed with other matters, or after it had lain for years and become enriched by various mixtures? We want to know all about it.

J. A. N.

For the New England Farmer.

SPONTANEOUS COMBUSTION.

Mr. Editor:—A few weeks ago, I saw an article going the rounds of the papers, stating that if cotton cloth which had been saturated in oil, was exposed for a given length of time to the direct action of the sun's rays, spontaneous combustion would take place. Allow me to present a case which may, in the main, substantiate this statement; and, as facts are everything in this day of theories, may serve to give to it additional weight.

Some years since, a little sister came running into the house, full of excitement, declaring that she certainly "smelt fire in the barn chamber." We hurried out into the finished loft of a large barn, and commenced an anxious search, for the smell of burning cotton was distinctly perceptible as soon as we entered. After a general overhauling of old rubbish, we discovered the fire in one of the barrels in which we kept our waste rags. Some ways down in the barrel, and under other rags, was a large piece well on fire, smouldering like tinder. I examined the piece and its situation with care, to learn the origin of a fire in so strange a place. There was nothing on which to ground the least conjecture, excepting the fact that the piece on fire smelt of oil, and what remained of it appeared oily. Now whence came the fire? It is my impression that nothing had been emptied into the barrel for some days previous; the barrel itself was close under the eaves, though the sun—it was summer—could have no *direct* access to its contents. No child was ever allowed to play with a match about our premises, and no family could be more careful in the use of them. These are the facts, and others may draw from them what inferences they may, but for ourselves, we made a standard rule in the family, never for the future to drop anything into the rag-bag containing a particle of oil, but to deposit such refuse in the proper place for combustion—the fire-place. Now it does not seem to my mind at all improbable that some of the incendiary fires which are charged against the morals of the community, may have an origin similar to this; for we know that oiled rags are frequently thrown as nuisances into out-of-the-way places, or dropped into the general deposits for waste cotton material; and by-and-by, it may be that some thousands of property are suddenly annihilated, and the public mind is shocked, and nervous people are alarmed at the presence of some unprincipled incendiary in their midst. We hope that every prudent householder will look to it, that there may be no such incendiary lurking about his premises.

J. G.

For the New England Farmer.

SAVE YOUR BACON.

About a couple of years ago, we were entertained at the house of a friend with a good, old fashioned dinner of eggs and bacon. We complimented our host on the superior quality of his bacon, and were curious to inquire the way to like success in the preparation of a dainty article of diet, though one that is better fitted for the palate of an epicure than for the stomach of a dyspeptic. To our surprise we were informed that that portion of our meal was cooked eight months before. Upon asking for an explanation, he stated that it was his practice to slice and fry his bacon, immediately upon its being cured, and then pack it down in its own fat. When occasion came for using it, the slices slightly refried, had all the freshness and flavor of new bacon, just prepared. By this precaution, our friend had always succeeded in "saving his bacon," fresh and sweet, through the hottest of weather.

J. G.

Marblehead.

Love for Trees.—We love trees. They seem like things of life. They stand like sentinels while we sleep, and whisper to us through the day. It seems as though they were our kindred, and we hold converse with them as we watch their swaying branches through the long summer days.

BESSIE.

Bessie wears a gown of red,
A homespun gown and apron blue;
She has no hat upon her head,
And her wee brown feet are without a shoe.
Bessie has hair like the sunset's gold,
And her eyes were born from the deep blue sea;
In their depths a story is told—
I love Bessie and she loves me.

Bessie's hands are hard with toil,
And her cheeks are dark with the wind and rain;
But her lips are rich with the rosy spoil,
That if once I taste, I must taste again.
Bessie has ne'er a silken gown,
Nor a crimson hat nor a necklace fine;
But she wears of cowslips a golden crown,
That I'd rather than any queen's were mine.

Bessie dwells in a lowly cot,
A lowly cabin with trembling walls;
'Tis old and poor, but she thinks it not,
And loves it better than lordly halls.
She counts the stars as she goes to sleep,
And loves to listen the pattering song,
That o'er her head the rain-drops keep,
In the April weather, all night long.

Bessie's step is like the fawn's,
Her voice like the chiming of silver bells;
I hear it oft in the summer morn
But I dare not whisper what it tells!
Lingering and dying round my heart,
Ever and ever its echoes be;
Who shall divide us, or who shall part?
I love Bessie and she loves me.

BEAUTIFY YOUR HOME.

Every man should do his best to own a home. The first money which he can spare ought to be invested in a dwelling, where his family can live permanently. Viewed as a matter of economy, that is important, not only because he can ordinarily build cheaper than he can rent, but because of the expense caused by a frequent change of residence. A man who early in life builds a home for himself and family, will save some thousands of dollars in the course of twenty years, besides avoiding the inconvenience and trouble of removals. Apart from this, there is something agreeable to our better nature in having a home that we can call our own. It is a form of property that is more than property. It speaks to the heart, enlists the sentiments, and ennobles the possessor. The associations that spring up around it, as the birthplace of children—as the scene of life's holiest emotions—as the sanctuary where the spirit cherishes its purest thoughts, are sure as all value; and whenever their influence is exerted, the moral sensibilities are improved and exalted. The greater part of our happiness of today is increased by the place where we were happy on yesterday, and that, insensibly, scenes and circumstances gather up a store of blessedness for the weary hours of the future! On this account we should do all in our power to make home attractive. Not only should we cultivate such tempers as serve to render its intercourse amiable and affectionate, but we should strive to adorn it with those charms which good sense and refinement so easily impart to it. We say easily, for there are persons who think that a home cannot be beautified without a considerable outlay of money. Such people are in error. It costs little to have a neat flower garden, and to surround your dwelling with those simple beauties which delight the eye far more than expensive objects. If you will let the sunshine and dew adorn your yard, they will do more for you than any artist. Nature delights in beauty. She loves to brighten the landscape and make it agreeable to the eye. She hangs the ivy around the ruin, and over the stump of a withered tree twines the graceful vine. A thousand arts she practices to animate the senses and please the mind. Follow her example, and do for yourself what she is always laboring to do for you. Beauty is a divine instrumentality. It is one of God's chosen forms of power. We never see creative energy without something beyond mere existence, and hence the whole universe is a teacher and inspirer of beauty. Every man was born to be an artist so far as the appreciation and enjoyment of beauty are concerned, and he robs himself of one of the precious gifts of his being if he fails to fulfil this beneficent purpose of his creation.—*Southern Times.*

HAY CAPS.

The importance of the hay crop, and the short time in which it is necessary to secure it, demand that every precaution should be taken to prevent delay or losses in harvesting it.

With the almost uniformly dry months of July and August, as we have had for three years past in this region, the haymaker may say, perhaps, that coverings for the protection of his hay-cocks are unnecessary. But there are sections of country every summer, where the "weather is catching," and large quantities of hay are ruined or much injured. After the grass has been made nearly ready for the barn, the loss is not that of the grass alone, but of the labor also that has been bestowed upon it, and which has now become a part of the value of the crop.

Besides, if there is a way to protect the partially made crop out of doors, it prevents many tons from being injured after being taken in. When the rain comes, the length of its duration is uncertain, and the farmer will often hurry in hay that is not sufficiently cured, and that will heat and become musty in the barn. And then there springs, both from the wetting and the moulding, a disappointment and uneasiness of feeling, that should be avoided, if it can be done without too expensive an outlay.

Again, in curing hay, it is sometimes absolutely necessary that it should remain out two or three nights, and there is too much risk without some protection of the cocks.

A simple, cheap, and thoroughly effectual remedy against losses by wetting hay, may be found by using sheeting a yard wide, and sewing two pieces two yards long, each, together; hem the edges; turn down the corner an inch, and then that turn another inch, and sew it down strong. This will form a loop, into which a strong twine must be placed. When the cap is thrown over the cock,

thrust a pine pin about a foot long through the string at each corner, and up into the hay, which will keep the cap in place, unless the whole cock is overturned.

Your cap, made as above, will be two yards square, which will be sufficiently large to cover half or two-thirds the way down of a common cock; beyond this the rain will do no harm, as the water will not penetrate the hay.

Good firm sheeting, worth eight to nine cents a yard, will shed the rain from the hay through a storm of three or four days' continuance; and the caps will last a lifetime by taking good care of them when not in use.

Take a light nail cask and make a bail to it from part of a hoop, to keep and carry the pins in, and you are then provided with a remedy which will pay its cost in a single season of "catching weather."

Caps may be found ready for use at Nourse, Mason & Co.'s store, Quincy Hall.

For the New England Farmer.

BREEDS OF POULTRY.

Mr. Editor:—There is no one subject perhaps, connected with farm economy, upon which a greater diversity of opinion exists, than the superiority of the different breeds of poultry. The popularity of the ostrich raced Shanghaes and their compeers is deservedly at an end. With some, the Bolton Grays are a sine qua non; others advocate the black Spanish; while some avow a prejudice for Dorkings and Polands. If we drop the pure bloods and descend into the mixed breeds, we also find a variety of opinions. Some advocate yellow legs, others blue, and all can produce quite a formidable array of statistics to prove the excellence of their favorites.

I am not sure that we have greatly improved upon the type so eloquently given by Dryden, which I take the liberty of transcribing for the benefit of your readers to whom it may not be familiar.

> "High was his comb and coral red withall,
> In dents embattled like a castle wall,
> His bill was raven black and shone like jet,
> Blue were his legs and orient were his feet,
> White were his nails like silver to behold,
> His body glittering like the burnished gold."

Now I doubt whether the most enthusiastic admirer of any breed can give us a description exceeding this. Be this as it may, however, after a somewhat extensive experience, I have come to the conclusion, that, take them for all in all, the grey Dorkings and the Games are the best birds for this climate. The former are larger and hardier than the white Dorkings, are remarkably full breasted, and are excellent layers. The Games are the hardiest of all, approaching, perhaps, more nearly to the wild breed than any other. Out of a great number hatched last spring, I do not remember losing one by disease. For splendor of plumage, they are altogether unapproachable, and I am convinced that few surpass them in laying qualities, while the delicacy of their flesh is unrivaled.

Dartmouth, 1856. J. R. S.

For the New England Farmer.

THE VALUE OF LAND.

We last spring told our neighbor and highly esteemed friend, who has many a time represented his town in the Legislature, filled county offices of trust and honor, and who owns a very large farm, that we had made a purchase of real estate. "How much land have you bought?" was asked. Two and a half acres, fenced with stone wall, no stones remaining on the surface of the ground, with over fifty apple trees upon the same, was answered.—"How long have the trees been transplanted?" Four years. "How much did you pay for the land?" Two hundred dollars an acre. Shaking his head, "no land is worth two hundred dollars an acre for cultivation." We informed him that it was worth that for building purposes, and he shortly after took his leave.

The land was in grass, except a strip on one side of the field containing one row of trees which were full twice as large as the other trees, which had been only imperfectly dug around. This was taken as conclusive evidence that trees thrive better when cultivated around.

Not wishing to plow the whole field, having no manure to apply, a strip was plowed around each tree nearly a square and planted to potatoes. What slight pruning the trees needed was attended to, and they were washed twice during the summer. The last of April they were washed with strong suds and sal soda; the first of July they were washed with potash water not quite strong enough to bear an egg. The land had received no manure or other fertilizer for many years. The following is the result:

	Dr.	
To plaster and ashes	$3,50	
To labor, seed, &c.	18,22	—$21,72
	Cr	
By hay standing, 3480 lbs. sold for	$20,00	
By crop of potatoes, &c.	13,72	
Growth of 54 trees, 33⅓c.	18,00	—$51,72
		$30,00

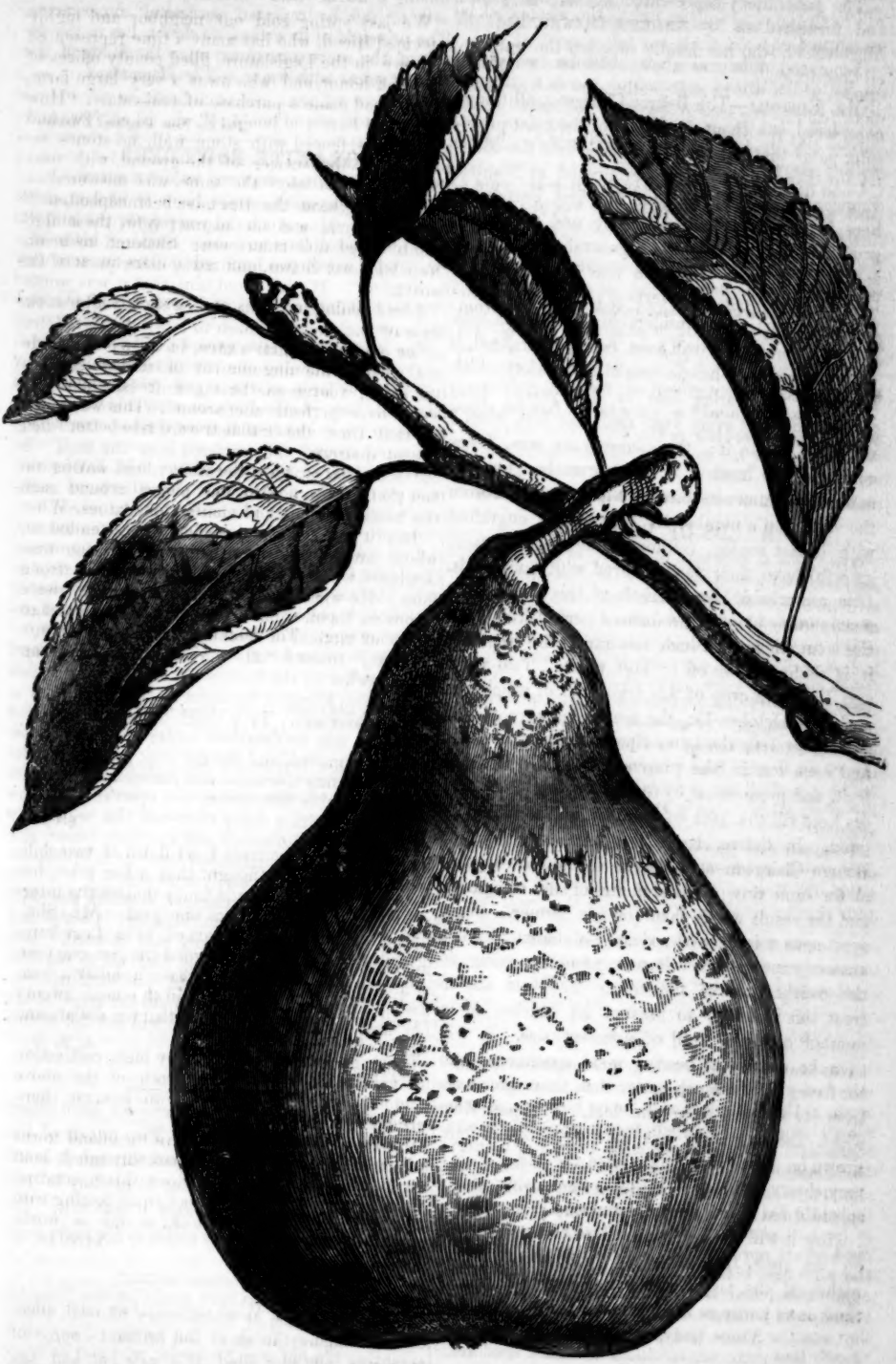
The growth of the trees I set down at two shillings each, not that I thought that a fair price, but because that amount made thirty dollars the interest of five hundred dollars one year. Mr. Sheldon, of Wilmington, remarked at a Legislative Agricultural meeting that "a good tree, set one year, is worth a dollar; it will increase a dollar a year for the next nine years, and in the next twenty years it will pay the interest of that ten dollars and the principal also."

There are many, doubtless, by high cultivation and great care, verifying the truth of the above statement. Would for their own interest there were more such.

However cheap land may sell in the inland towns of New England, there is undoubtedly much land that pays the interest of two or three hundred dollars an acre, and if put on an equal footing with bank, railroad and other stock, would be worth that. Yeoman.

Brookfield.

☞An editor out West says—"If we have offended any man in the short but brilliant course of our career, let him send us a new hat, and say nothing more about it."



BEURRE CLAIRGEAU PEAR.

THE BEURRE CLAIRGEAU PEAR.

The pear, finely represented above, was grown and furnished us by ANDREW LACKEY, Esq., of Marblehead, who has kindly supplied the subjoined description.

MR. EDITOR:—The Beurre Clairgeau, all things considered, is without doubt one of the most promising pears that has been introduced into the country for many years. It was originated at Nantes, France, by M. Clairgeau, and was first introduced here in 1848. Its early bearing and wonderful productiveness will make it a general favorite. It is a rapid grower, either on pear or quince. On the latter it is apt to overbear; and unless the fruit is thinned, and considerable pains taken with the tree, its energies will soon become paralized, if not exhausted. I have a tree of this variety which has been in bearing four or five years; have thinned the fruit every year until the last, when I neglected to do it; the consequence was, I was compelled to head it in very severely. On the quince, it commences bearing the second year from the bud, and a number of pear stocks engrafted with it last season, (although they made a rapid growth) have their tops covered with fruit buds. One remarkable characteristic of this tree is, that nearly every blossom produces a perfect fruit; and the stem clings with such tenacity to the tree that it is seldom blown off by high winds. Two years ago, I raised a crop of this fruit, part of which was gathered October 1st, the remainder were picked November 1st; the latter ripened November 28th, and were cut in the presence of good judges of fruit, and pronounced by them first-rate. The others kept till the 10th of January, and were not so good. In Salem, last season, fine specimens of Beurre Clairgeau and Beurre d'Anjou were eaten at the same time, and the merits of each compared, and the result was in favor of the former. Some specimens raised in the vicinity of Salem did not answer expectations. It was probably owing to the overbearing of the trees. The best way to treat this variety is to prevent its bearing for a number of years, until of sufficient size. It will then be capable of bearing good specimens; and the flavor will be much better than those grown on trees two years from the bud. The pear from which the engraving was taken, was one of four, grown on a tree three years from the bud. It is a very showy fruit, of a yellow russet color, with a splendid red cheek on the sunny side.

How it will answer for orchard culture, worked on the pear, time alone will determine. It has withstood the last winter remarkably well, and I think is as hardy as most trees of this species.

Yours truly, ANDREW LACKEY.

FINALITY ON CANADA THISTLES AND WHITE DAISIES.—A friend informs us on the authority of Williard Day, Esq., of Brooklyn, that these nuiances may be *destroyed by once mowing*, if done *during a warm rain*. Mr. Day has satisfied himself of this by repeated successful experiments. The principle of its action, no doubt, lies in the decay of the roots consequent upon the filling of the hollow stems with water.—*The Homestead.*

For the New England Farmer.

GRANITE BOWLDERS:

A PRACTICAL WAY TO REMOVE THEM.

Many ingenious theories have been educed, as to the time when, and the manner how, these fragments of granite stones were scattered over the New England States, and many other parts of the world.

Some geologists think they were brought at the time of the flood; frozen to large pieces of ice, as we often see small stones in the ice of our rivers. From the direction of the various strata of the earth, they argue that a drift has sometime swept over it, from north-west to south-east, and at that time, the bowlders were taken from their parent quarries, and scattered over the land. In corroboration of this hypothesis, is the well-known fact that granite bowlders are found in large quanties to the south-east of quarries of that stone.

But it is of little consequence to the farmer, whose arable lands are encumbered with these bowlders, whether this or other theories be true or false. He wants to understand a practical way of removing them. The following is a cheap and expeditious method of breaking them, when large.

First, remove all the earth from around them, as low as the bottom of the bowlder; this being done, kindle a fire upon its top, or side, as is most convenient. In a short time, thin scales of the stone will be detached under the fire; these must be removed, and the fire kept burning. The heat expanding the stone and converting the moisture it contains into steam, will open one or more seams; now with a sharp crow-bar, the seams are widened by well-directed and energetic blows, and in a short time the mammoth bowlder is broken into pieces that may be easily removed.

This method is much cheaper, requires less skill, and is less dangerous than blasting. Coarse and refuse wood, of little value, may be used. Any man can do the work, tending from six to ten fires at a time, and will find it hard but exciting business. Do not throw water upon the stone at all, but keep up the fire, and you will not fail of success.

J. R. W.

Springfield, Vt., 1856.

SALTING HAY.—This practice—we have reason to think—is greatly overdone. *Two quarts* of fine salt to each ton of hay, scattered through it, is sufficient. It is a wasteful thing to get hay in half made and then attempt to save it with salt. Too much salt is as injurious to cattle as for them to go without any.

☞ A decision has been made by the Supreme Court of Alabama, by which every railroad, steamboat, or stage, is liable to the owner of any slave absenting himself from his owner, who may be found traveling with them under any disguise or concealment.

For the New England Farmer.

FARM BUILDINGS.

EXTRACTS FROM THE RECORDS OF THE CONCORD FARMERS' CLUB.

F. G. Pratt said, the main object to be kept in view, in erecting farm buildings was, to adapt them as perfectly as possible to the uses for which they are intended. * * He thought the Shaker barn at Harvard a good pattern—one important feature of which is that of the elevated drive-way for hay, by which much of the hard labor of pitching up is saved, as well as much time; time, too, when the minutes are precious.

Charles B. Clark said he would prefer to have the stable separate from the barn where the hay is kept.

W. D. Brown said he had always been accustomed to a poor barn, but lived in hopes of a better. He thought there was no necessity for so many buildings as we sometimes see on farms—one for stock, one for tools, one for carriages, another for grain, another for the pigs. He was glad to see that modern barns are becoming larger and more comprehensive in plan. There was great economy in large barns, built so as to include all needed accommodations for cattle, carriages, grain, tools, &c. He thought hay was often injured by gases rising from the manure in the cellar. To prevent this, the hay should not come down to the floor. He would like to have his barn face to the south, and then would arrange the interior thus: on the north side he would tie his cows, on a floor 4 ft. 4 in. long; for oxen, 5 ft. or 5 ft. 2 in.; would fasten cows with stanchions, giving each cow a little more than 3 ft. of room—but oxen need more freedom to move, and he would tie them with chains. There should be a trench behind the cattle 4½ or 5 in. deep, and 12 or 13 in. wide, and a scuttle with hinges to let the manure down. On the south side of the barn he would have horse-stalls, carriage-room, tool-room vinegar-room, &c. This arrangement would effect a complete cut-off between the cellar and the hay. Under the horse-stalls he would keep his swine, and feed from the floor of the stalls—the trough by means of a pulley to be raised up for convenience of cleaning, filling, &c.

John Raynolds thought the trench behind cattle should be 22 or 24 inches wide. With that width the platform is kept dry and clean.

J. B. Moore did not think a platform 4 ft. 4 in. wide, long enough for large cows; 4 ft. 6 in. wide would be better; and there should be a crack in the trench to let off the water.

John Raynolds expressed a decided preference for keeping cows in a barn separate from that in which hay is kept. Would build on to the hay-barn an L for cows, and separate by a sliding door. Would have the L, 36 ft. wide, well ventilated on the roof, and the cows arranged on both sides. The cellar should be ventilated by two chimneys leading up through the roof; the gases damage the building as well as the hay.

J. B. Moore has not found his hay damaged by the manure in the cellar. No farmer can afford to let the gases escape so freely—he should use proper absorbents. He would not build with matched boards—thought hay more likely to be injured, than when the cracks are larger, and admit a freer circulation of air to dry up the moisture.

J. B. Farmer asked if hay was not full as likely to be damaged by vapors from the cow stalls as by gases from the manure under the barn? He thought, if the floor was tight, the manure would not injure hay that was well cured before it was housed.

Jos. D. Brown did not think his hay had been injured by manure in the cellar of his barn. He thought it would injure the health of cattle to crowd them into a small space; they need large room and good air. He thought that Wm. D. Brown's plan of tying cows on the north side of the barn, might do for dry cows, but he would prefer to have his milch cows on the south side.

John Raynolds introduced to the meeting Mr. Hammond, of Grafton, who has had much experience in the subject of Farm Buildings.

Mr. Hammond said he had been engaged for a number of years, in different towns and States, as an architect for farm buildings. Has found great difference of opinion as to the arrangement about the barn—there was need of better models. His own experience was decidedly in favor of separating the cattle-room and the hay barn; is satisfied that hay is injured by manure in the cellar under it.—The gases injure the lower timbers; had known timbers in barn-cellars rotted in six years. Hay is as likely to be injured as timber. Barn-cellars should be thoroughly ventilated by pipes leading up through the roof, and absorbents should also be freely used to secure the ammonia. By actual experiments it was proved to him that it was less labor to feed cattle in a separate room, than in the usual manner, when the cattle and hay were together. He moves the hay to the cow-house on a truck. He considers ventilation of the cattle barn very important. Has windows every ten feet behind the cows, with blinds, which, when the windows are open, give the cool air an upward motion, and thus prevent its blowing directly on the cows. Over the pitch-holes in the upper scaffolding, he has a ventilating sash in the roof by means of which he can regulate the temperature of the barn, and keep it a little above the freezing point. In his barn for the last five years, it has not frozen five feet from the door. Cows give more milk in this equable, moderate temperature. He would not match the boards for the walls of his hay-barn, but would have a tight floor. If possible, would arrange the drive-way sixteen feet above the lower floor, so as to pitch the hay down, instead of up. In proof that hay is injured by keeping the cattle and manure under it. Mr. Hammond stated that four men undertook to compare his hay with that of some of his neighbors. They found his hay perfectly bright and sweet, while that in four other barns examined, built in common style, was all more or less damaged—though a part of it was mowed and got in the same day as that which was examined of his own, and they estimated that his hay was worth three dollars a ton more than the other lots. In well-ventilated barns, in barns where there are cracks between the boards, hay will keep better, he said, than in barns built with matched boards or clapboards. If the barn is tight, the hay will be musty.

Jos. D. Brown asked if hay that was stacked in the field in such a way as that no rain could get into it, was better than that kept in tight barns? He did not believe it was; and he thought hay would keep as well in barns built with tight walls, as in those built more openly—that the dampness which is condensed on the walls, and sometimes shows in frost on the roof, is caused by the stock.

Mr. Farmer said there was much difference of opinion and practice on curing hay. Whether the hay is damaged or not in the barn, depends a good deal on its condition when brought in. He got in some last year rather damp in bad weather, and it became quite musty. The main trouble arises from getting it in too green.

Mr. Hammond said the exposed timbers of a barn often presented a deceptive appearance. He had frequently examined barns, and found the lower timbers unsound, though looking well on the outside.

J. B. Moore said he had recently had occasion to drive some spikes into the timber in his barn-cellar, and found it hard work to get them in. The timbers were of oak. He thought it poor policy to put any but the best and most durable timber in such places. He keeps his cellar doors open in summer.

Dea. Wheeler said he had one of the first barn cellars built in Concord—built in 1832. Under his barn the timbers are as sound as when first put in.

Mr. Hammond recommended beveled girths, so that the water should be made to run off outside; has had hay injured three feet from the wall, when the hay happened to lie so as to turn the water inward. Rain drives into a barn worse if the boards are put on horizontally, than if perpendicularly. He would have rows of lights on both sides of the barn. He described a Shaker barn which he had assisted to arrange. It is 100 ft. long, 44 ft. wide, with 26 ft. posts; drive-way floor 18 ft. above the sill, built on a side-hill. The cattle are tied in two rows across the barn, facing each other, 12 ft. apart. There are pens for turning cows in loose, calf-pens, &c. The platform on which the cattle stand varies in length from 4 ft. 5, 4 ft. 7, to 4 ft. 10. The trench behind them is 22 in. wide, and 5 in. deep. They put dry absorbents in the trenches. Mr. H. said he would have all absorbents used for this purpose as dry as possible. A cubic foot of dry pulverized peat or loam, will absorb three gallons of liquid, and when so saturated, is much more valuable than the same quantity of the solid excrements of cattle. The stanchions pitch forward 5 in. —the crib is placed inside. The platform on which the cattle stand, is sloped 2½ in., and he would give the same pitch to the platform of the horse-stalls. The platform should have a good strong floor under it; valuable animals are often lost or injured by insecure floors.

C. B. Clark thought there should be no slope to the platform for horses. M. P.

HOW MUCH DEPENDS ON A LATCHET.

Our farmer friends should remember a quotation, which we find here from M. Say, showing how much depends on a latchet.

"Being in the country, I had an example of one of those small losses which a family is exposed to through negligence. For the want of a latchet of small value, the wicket of a barn-yard leading to the fields was often left open. Every one who went through drew the door to; but as there was nothing to fasten the door with, it was always left flapping; sometimes open and sometimes shut. So the cocks and hens, and the chickens, got out and were lost. One day a fine pig got out and ran off into the woods; and after the pig ran all the people about the place—the gardener, and the cook, and the dairymaid. The gardener first caught sight of the runaway, and, hastening after it, sprained his ankle; in consequence of which the poor man was not able to get out of the house again for a fortnight. The cook found, when she came back from pursuing the pig, that the linen she had left by the fire had fallen down and was burning; and the dairymaid having, in her haste, neglected to tie up one of her cows, the cow had kicked a colt, which was in the same stable, and broken its leg. The gardener's lost time was worth twenty crowns, to say nothing of the pain he suffered. The linen which was burned, and the colt which was spoiled, were worth as much more. Here, then, was caused a loss of forty crowns, as well as much trouble, plague and vexation, for the want of a latch which would not have cost threepence."

M. Say's story is one of the many examples of the truth of the old proverb: "For want of a nail the shoe was lost, for want of a shoe the horse was lost, for want of a horse the man was lost."

For the New England Farmer.

SCRAPS—GREEN WOOD.

Last spring, I gave the result of my observation on the use of small potatoes for seed. As the readers of the *Farmer* know, it brought in quite a crop of articles, whether all small potatoes or not. I have endeavored to balance the accounts, and adding my own experience again this year, with small seed, I think the evidence is very nearly well balanced. Judging from all that has been written, I see not why we are not at liberty to use small, if we cannot get large seed, and yet, not lose caste with good farmers.

There is another point, which concerns, not only the farmer, but every other man who uses wood for fuel. This is the use of green wood. Chapter after chapter is written to show that the use of such wood is in all cases productive of loss of heat; and even our popular works on chemistry circulate the same thing. If, on the other hand, you go among our farmers and ask which makes the hottest fire, a given amount of all dry, or of mixed wood, and they will almost uniformly say the latter. Now, how comes it that the two authorities differ so much?

There is doubtless truth in both, and it is from a lack of discrimination of cases, that the former pronounce against book knowledge, and the book men affirm the ignorance of the former. It is from this want of discrimination, that the difficulty between practical and theoretical men usually arises.

The chemist well knows that water does not burn very well as such, but if he decomposes the water, forming oxygen and hydrogen, and then burns them together, he will produce a most intense heat. He also knows that a high heat will decompose water, and that if it is decomposed in that way, they will again unite and increase the heat. If carbon be present, a strong light will also be formed. The result of this union of the elements of water with carbon, many a one has seen to their own discomfort, when they have attempted to put out burning fat with water. The flame went to the top of the room, while the heat kept them at a respectful distance. The water was decomposed by the heat of the burning fat, and its elements uniting, made an intense heat.

The blacksmith understands the fact, but is ignorant of the reason, when he puts water on his fire to make a great heat, as he often does. Then, too, the heat of the burning coal decomposes the water and the same result follows as before. In the same way with green wood. If a hot fire is to be kept up, the decomposition of the water of the green wood will add to the heat; while the quantity of wood consumed will be less than if all dry was used. As to the value of green wood, or rather, the amount of combustible material in it, as compared with wood seasoned out of doors at least, there is doubtless more in the former than in the latter. Hence it is that wood should be seasoned under cover.

The cost of drawing wood, all things considered, is probably not much greater green than dry.

By thus considering the circumstances of the case, we reconcile the opinions of practical men with the teachings of science. I. H. N.

MEDICAL USE OF SALT.

In many cases of disordered stomach, a teaspoonful of salt is a certain cure. In the violent internal aching, termed colic, add a teaspoonful of salt to a pint of cold water; drink it and go to bed; it is one of the speediest remedies known. The same will revive a person who seems almost dead from receiving a heavy fall, &c.

In an apoplectic fit, no time should be lost in pouring down salt and water, if snfficient sensibility remain to allow of swallowing; if not, the head must be sponged with cold water until the sense rerurn, when salt will completely restore the patient from the lethargy.

In a fit, the feet should be placed in warm water. with mustard added, and the legs briskly rubbed, all bandages removed from the neck, and a cool apartment procured, if possible. In many cases of severe bleeding at the lungs, and when other remedies fail, Dr. Rush found that two tea-spoons full of salt completely stayed the blood.

In case of a bite from a mad-dog, wash the part with a strong brine for an hour, and then bind on some salt, with a rag.

In toothache, warm salt and water held to the part, and removed two or three times, will relieve it in most cases. If the gums be affected, wash the mouth with brine. If the teeth be covered with tartar, wash them twice a day with salt and water.

In swelled neck, wash the part with brine, and drink it, also, twice a day, until cured.

Salt will expel worms, if used in food in a moderate degree, and aids digestion, but salt meat is injurious, if used much.

BLACKSMITHING IN TURKEY.—A correspondent of the New York *Commercial*, writing from Constantinople, gives the following description of the way in which Turkish blacksmiths do their work:

"In passing a blacksmith's shop the other day, I observed an attempt to shoe a mule. The animal was very refractory, and not at all inclined to have any liberties taken with his understandings. After several fruitless attempts to conquer his obstinacy, four Turks took hold of him, threw him down, and ashed his legs to a stick, rolled him over on his back, and put his shoes on at their leisure. It was a novel but a very effectual method. At best it always takes three men to shoe a horse—one to hold him another to hold up his foot, while a third fastens on the shoe."

LETTER FROM MR. BROWN.

Washington, D. C., June 20, 1856.

DEAR SIR:—It is more than three years since I have visited this city, and during that time marked changes have taken place. The city now has suburbs; we do not dash from the country, or rather, the wild woods and jungle pastures, directly into Pennsylvania Avenue, as we used to some twenty years ago. On every side of the city, there is visible improvement. Some of the lands in the immediate neighborhood, once covered with the decaying flesh and bones of dead horses, together with the garbage of the city, infinitely worse than the contents of Falstaff's buck-basket, are now enclosed, reclaimed, and covered with grass, shrubbery and trees. Roads that were originally projected, but whose boundaries could only be found in some of the dark recesses of the City Hall, have been laid out, graded, and have a "local habitation and a name." In the thickly-settled part of the city the improvements are none the less striking; and in no particular are they more pleasing than in the new style of architecture which has been introduced in some of the more recently erected dwellings. The original style of building here was truly of the "mixed order"—made up of a grand touch of the Gothic and Corinthian, pig-stye, corn-barn and rope-walk. To look at a house in its best face, it was like a book standing on one of its ends, long, high and rakish, causing the beholder to wonder why the first "gust" did not topple it down, until he turns the corner and finds how it is supported by a batch of young houses clustering at its roots. A better taste has been introduced, and its influence is perceptible in every part of the city. With this improvement has sprung up another, not less important than the first,—and that is in the multiplication of fine shade trees and choice shrubbery and flowers. The finest among the gardens I have visited is that of Major FRENCH, a few rods east of the capitol, on soil that I once knew as unkindly and perverse as that of any cold spring land on any hill-side of New England; but now, at this early state, literally covering the earth with flowers, shrubbery and grass, gladdening the eye, and sending blessings on every breeze that is wafted from them to the neighborhood around. No high, tight fence, like that about a country jail, cuts off the vision or obstructs the fragrance that exhales from this delectable spot. If a little one lingers at the gate, it is met with a kindly "God bless you, my child; here, take these flowers, and enjoy them with us." O, if men would but unbutton the great coat of selfishness in which so many of them are

enclosed, and let out their sympathies upon the world, how it would kindle emotions of gratitude and love, and brighten the pathway of the meek and lowly! Mr. Corcoran, the banker, has a fine garden, but being enclosed with a high brick wall, it sheds no "sweetness on the desert air." He has a fine gallery of paintings, however, open to the inspection of the public, one day in each week. It contains many fine pictures, whose inspection affords gratification to many; but they are not like the pictures of God's handiwork in the garden, that are shut out of sight by the ugly wall.

Downing's genius has given a new creation on the "old fields" that surrounded the Smithsonian Institute, Judiciary Square, &c. Its influence did not stop on the objects to which it was particularly directed. It set a good example, which many have been wise enough to imitate.

The frequent rains of the season have given the country a beautiful aspect. The foliage is clean and heavy. Some of the buttonwoods, so long infected, are covered with luxuriant leaves, and look finely. The grass promises to afford an abundant crop. In Delaware and Maryland, haying is already commenced, to a considerable extent, while hundreds of acres on the way were covered with the red clover in full bloom. Corn looks well, and some fields I saw where it is already a foot in height. The wheat crop also appears well, being already headed out. Strawberries and currants were in great abundance in the Philadelphia market. New potatoes, here, are selling at $3,00 a bushel, while the second crop of peas is now presented, and are selling low.

While on my way here I had the pleasure of looking in upon the National Convention, at Philadelphia, and was forcibly impressed with the oneness of purpose and the harmony of feeling which prevailed in that assembly. There was nothing like bitterness or discord in all its deliberations. But you have long ago learned its results, and there is no need of my repeating them.

The weather to-day is quite hot—the thermometer in the shade standing at 90°, so that with the plentiful moisture in the soil, vegetation is proceeding with great rapidity.

I shall visit in this region such farmers as are men of progress, and perhaps note my observations for future remark.

Truly yours, Simon Brown.

Joel Nouse, Esq., Boston.

Friction Matches.—The first lucifer or friction matches used were prepared with sulpher, chlorate of potash and gum. The ends of these, when dipped into a bottle containing asbestos moistened with sulphuric acid, took fire at once. Such matches have been superseded by the more simple locofoco matches, which ignite by friction without the aid of an acid. These matches are first dipped into molten sulphur cooled, then coated with a composition of 16 parts, by weight, of gum arabic, 9 of phosphorus, 14 of nitre, and 16 of fine peroxyd of manganese, and a little sulphuret of antimony. These ingredients are worked up with water to form a thick paste, into which the matches are dipped and then dried. Smalt and cinnabar are employed to color the ends of the matches. Those matches which ignite with a small crackling noise, are prepared with the chlorate of potash. It is a dangerous substance to use in their preparation. When it is employed care must be exercised that the gum paste in which it is mixed with the phosphorus, does not exceed 104° Fah. These matches are dried in a dry and warm (but not hot) room.

On October 24th, 1836, Alonzo D. Philips, of Springfield, Nass, obtained a patent for manufacturing locofoco matches with a preparation of chalk, phosphorus and glue. An ounce of glue is dissolved in warm water; to this is added four ounces ot fine pulverized chalk, and stirred until it forms into thick paste. One ounce of phosphorus is then added, and the whole kept a little warm and well stirred until the whole are well incorporated together. Into this the ends of the matches—which have been previously coated with sulpher and dried—sre dipped, and then laid in rows on slips of paper cut wide enough to lap over the ends of the matches.—*Scien. Am.*

INDIAN CORN.

The value of this cereal to the country has never been appreciated. Recent investigations and comparisons show conclusively that it is of more value than any other agricultural production, not excepting cotton even, about which so much has been said. The culture of corn has wonderfully increased the last few years; the ratio of increase being far greater than any other product. From 1839 tc 1849, as per census returns, the increase was fifty-eight per cent. Wool the next highest, its increase being fifty per cent.; cotton, twenty-four; oats, twenty; and wheat, sixteen. This is a remarkable result.

The cotton crop has not increased half so rapidly as the corn crop, and the claim of the former to the title of "king," is only in its influence upon the commercial interests of the country. The cotton crop of 1851 was nine hundred and twenty-seven millions of pounds, valued at one hundred and twelve millions of dollars, while the corn crop of 1850 was five hundred and ninety-two millions of bushels, which at the lowest possible price at which it can be estimated, is of far greater value than the cotton crop.—*Boston Journal.*

American Prizes at the Paris Exhibition.—The Paris correspondent of the *Commercial Advertiser* says the United States drew prizes at the great Agricultural Exhibition for every article that was presented for serious competition, numbering five. Pitt's Buffalo Threshing Machine drew a first class medal, and was sold to the Emperor for 2200 francs; Manny's Reaper drew a first class medal; a barrel of Col. Alston's South Carolina rice, do.; McCormick's Reaper, worked by Frenchmen, a second class medal.

CURE FOR CORNS ON HORSES' FEET.

MESSRS. EDITORS: — I noticed the inquiry of a correspondent in the March No. of *The Cultivator*, concerning corns on horses' feet. In answer I would say, corns of long standing are incurable. Those of more recent date can be helped. The only remedy I know, is the following, viz: Dig the corn out and pour in hot tar. If the horse is flat-footed, be careful about paring the heels—only rasp it carefully, and avoid having the shoe bear on the heel as much as possible. I make a few extracts from Youatt on the Horse, which come directly to the point.

In the angle between the bars and the quarters, the horn of the sole, has sometimes a red appearance and is more spongy and softer than at any other part; the horse flinches when this portion of the horn is pressed upon, and occasional or permanent lameness is produced. This disease of the foot is termed corns. The first thing to be done is to pare out the angle between the crust and the bars. Two objects are answered by this; the extent of the disease will be ascertained, and one cause of it removed. A very small drawing knife must be used for this purpose. The corn must be pared out to the very bottom, taking care not to wound the sole. It may then be discovered whether there is any effusion of blood or water underneath. If this is suspected an opening must be made through the horn, the matter evacuated, the separated horn taken away, the course and extent of the sinuses explored, and the treatment recommended for quitter adopted. Should there be no collection of fluid, butyr of antimony should be applied over the whole extent of the corn after the horn has been thinned, as closely as possible. A horse that has once had corns to any considerable extent, should at every shoeing have the seat of the corn well pared out and the butyr of antimony applied.—*Country Gentleman.*

THE GUANO TRADE.

The New York *Evening Post* furnishes some interesting facts respecting the guano deposits belonging to Peru, and the manner in which the business of removing and disposing of this important fertilizer is conducted. The guano islands (the Chinchas) are about one hundred miles north from Callao, the longest of the group being two miles in length and a quarter of a mile wide, and the least about a mile in length by half a mile in width. There is but little guano on the largest island, while upon the smallest it is two hundred and fifty feet deep. There are often from three hundred to five hundred sail of vessels, generally of large size, loading at one time. At the rate of which guano is now shipped from these islands, it will be exhausted in six to eight years. Twenty thousand tons are sometimes removed in a single day. There is on one of the islands a settlement of Chinese coolies, who are employed in digging the guano and loading the vessels. A task is given them each day, and if the gang fail to get out the given number of wagon loads, of two tons, each day, their bondage is continued a longer period, to make up; so many months or days being added as wagon loads are wanting.

These coolies are cheated into the belief by Mandarins, or knowing Chinamen, that they are to be shipped from China to California and the gold diggings, and are further deceived by the offer of a free passage. The shipmaster takes them to the Peruvian government and sells them for a round sum in the shape of freight money, and they are sent to the guano islands for life or for a term of five to seven years. The Peruvians also send all their prisoners of State, some two or three hundred, into the guano mines, where they are let out to work by day and confined by night.

The guano is hard and can only be broken up with the pickaxe. It is then broken and shoveled into the wagons and rolled through the "shutters" to the vessels. There is no fresh water upon the islands, and each vessel is required to carry a ton of water there for every hundred tons burden of the ship. The oldest captain in the fleet from each nation is appointed Commodore, and hoists his flag as such on his ship, where all disputes are settled. Indeed, the municipal laws of the islands and the fleet are decidedly of Yankee origin. Says the *Post:*

"The islands are about ten miles from the main land, and are composed of new red sandstone. The guano is not all bird dung, but is largely composed of the mud of the ocean; that brought from *Peru*, is so, at least. When anchors are hoisted into the ship from the holding grounds of vessels along the Peruvian coasts, large quantities of mud, of a greenish white color are brought up, and this mud when dried makes guano equally good with the guano taken from the islands. The birds and seals come upon the islands when the people are not at work, but it does not appear that their dung or decayed bodies are more than a foot deep on any of the islands. The composition taken from the islands, called guano, is stratified, and lies in the same form it did before it was lifted up from the bottom of the ocean. Our informant says that a geological examination of the islands will satisfy any man that the guano ships are bringing away from these islands a very different thing from the dung of birds or decomposed animals.

Gibbs & Bright, of Liverpool, have a lease of the Guano Islands from the Peruvian government for five years, which expires in 1857, but hope to get their lease renewed. This house pays the Peruvian government about $4,50 a ton for the privilege of taking all the guano from the islands, the government furnishing the men to dig the guano."

GIFFORD MORGAN HORSE.—Is there a horse known as the "Gifford Morgan." If so, by whom owned, and where kept, and what is his pedigree?

J. W. A.

REMARKS.—There is, or has been a horse by the above name—but we can give no account of him. Brother Howard, of the *Cultivator*, will be likely to know.—*N. E. Farmer.*

The horse Gifford Morgan was kept for several of the latter years of his life by F. A. Wier, of Walpole, N. H. He died at the stable of Benj. Gates, in the town mentioned, Oct. 30th, 1850, aged 24 years. He was got by Woodbury or Burbank Morgan, and was the sire of Green Mountain or Hale Morgan, and other well-known horses. —*Cultivator.*

☞ The Essex Agricultural Society have elected Ben Perley Poore to deliver the oration before them, at their annual fair in September, at Newburyport.

WOODWARD'S PATENT WEEDING PLOW.

The implement pictured above we have never used, or seen used, and can therefore only give a description of its services from others, which is as follows:—

The plow is made to run within 1½ inches of the row on the even surface, about ½ or ¾ of an inch deep, removing the weeds into the middle between the rows and covering them completely, so that if the weather is wet or dry they are effectually destroyed. When the second crop of weeds come up, the plate on the under side of the plow is moved to the land side, which is run in the middle between the rows, splitting the ridge made at the first time plowing, and the mould board rolls the weeds under the furrow, carrying the dirt up to the plants and covering nearly all those that were left the first time; what few are left should be pulled up or covered without disturbing the furrows next the row, the labor of which is all that is required in addition to what is done with the plow through the season. Ten hours labor of a man and horse is abundantly sufficient to cultivate an acre of corn after it is planted. It is for sale by H. O. Williams, Sunderland, Mass.

Grape Vines in Gardens.—Grape vines delight in being well manured, and will not give the best satisfaction without a dry bottom and abundance of rich soil. At this period of the season, those who have trained grape vines in their gardens, should examine them thoroughly, to destroy caterpillar worms while they are small. One may now be found in almost every bud, rolled up in a pellet of fine wool. All the labor thus spent will pay for itself. During warm dry weather, the surface of the ground around the roots of vines should be covered with litter to protect the tender rootlets, that spread out so near the surface.

Gifford Morgan Horse.—In reply to an inquiry of "J. W. A.," B. H. Andrews, of Waterbury, Conn., states that he has a Gifford Morgan horse at his farm for sale.

For the New England Farmer.

RURAL ECONOMY OF THE BRITISH ISLES—No. 15.

SCOTLAND.

If there is any country which might rebuke and banish the feeling of despair which exists respecting New England agriculture, it is Scotland. Whatever question might be raised respecting the soil of New England, as compared to that of England, none can be raised, as respects natural fertility, when it is compared with that of Scotland.

Within the last century, Scotland was one of the poorest and most barbarous countries in Europe. Its progress in agriculture is so recent, that it can be traced, and its progress seen, which cannot be done in England, where *sunk* capital has accumulated so long. No country owes so much as Scotland to the power of man over nature, except perhaps Holland. Switzerland certainly does not present such obstacles to human industry. The total production of the country has increased in the last century, tenfold and the agricultural products in an enormous ratio. Scotch agriculture is, at this day, in some districts at least, superior to English. In no country, is farming better regulated. It is to the model farms of Scotland, that people send their sons to be taught farming.

Scotland and its adjacent islands contain a total of nineteen million acres, nearly three-fourths of which are absolutely unfit for cultivation; especially the Highlands and islands of the north. There are perhaps five million acres of arable land, in Scotland, of which two millions at least are in meadow and artificial pasture. The Highlands are the country for oats, and grow scarcely any other grain. In the Lowlands, the four year course is generally followed. The products of the soil, vegetable and animal, are about $40 in value to each inhabitant, in this respect equalling England. Yet but little more than a century ago, famine and periodical scarcity devastated this country.

How comes it that Scotland has so rapidly attained this high production, in spite of the natural infertility of her soil and climate? The answer undoubtedly is, that it is owing to the employment of capital and skill; though you would be told in Scotland, that it was owing to the fact, that the land is held in large properties, there being but 7,800 proprietors in all Scotland. But though large property prevails in Scotland, the farms are not large, hardly middle sized. I cannot help thinking that if the farmers owned the farms, and used the same capital and skill as now, the results would be as great, or greater than now.

The Lowlands yield nine-tenths of the produce of Scotland. Let us enter the undulating country which surrounds Edinburgh, called the Lothians, containing about 1,200,000 acres. Farming here, is certainly not to be equalled. Rents of $7,50, $15 and $25 the acre are not uncommon, the average about $5,00; and the farmer makes nearly as much profit as the proprietor. The meadows in the neighborhood of Edinburgh are irrigated with the sewerage of the town, and are cut six or eight times during the season. Some of them let as high as $150 and $200 per annum, the acre.

A great part of the wheat produced in Scotland is grown in the Lothians, which are now famous for cereal crops. Yet this soil was at one time reckoned incapable of bearing even rye; only barley and oats were cultivated. It is mentioned that in 1727 a field of wheat of about eight acres, near Edinburgh, was the object of universal curiosity. Now one-fifth of the Lothians, about 250,000 acres, is in wheat, and in good seasons, this crop yields from 30 to 45 bushels the acre. Here, again, it is the Norfolk rotation more or less modified, according to local circumstances, which produces this large return. Why should it not do so in New England? Turnip cultivation, the basis of the rotation, is no where better understood than in the Lothians. A complete system of drainage has existed for a long time past. Every farm, or nearly so, has its steam engine. Stabulation of cattle has been long in common practice. In the county of Haddington alone, which contains not quite 200,000 acres, in 1853, one hundred and eighty-five steam engines, of six horse power each, were employed for agricultural purposes, besides 81 water mills.

See what the system of farming was in former times, in the Lothians, and other parts of Scotland. The lands of a farm used to be divided into what were called in-field and out-field. The out-field portion remained quite in a state of nature, and was used as pasture; the in-field, on the contrary, produced barley and oats, uninteruptedly in succession. A worse system can scarcely be imagined. Fallows are an improvement on this barbarous practice. The starting point in Scotland, from which improvement began, was, certainly, low enough to encourage New England.

Now enter Ayrshire, for I do not mean to give a minute account of all Scotland, but only such an account as will show the New England farmer what Scotland was, and what it now is. "Fifty to sixty years ago, there was scarcely a road which was passable in the whole country," says a local writer. "Everywhere the cottages were built of mud, and thatched with straw, the fire in the center, with an opening in the roof, to serve as a chimney, and surrounded with a dunghill, while the land was covered with all sorts of weeds. The only vegetable cultivated, consisted of a few Scotch cabbages, which, with milk and oat-meal, formed all the food of the population. Successive crops of oats were taken off the same field, as long as it continued to produce anything beyond the seed sown, after which it remained sterile, until it was fit for producing another miserable crop. The cattle were famished in winter, and when spring arrived, could scarcely rise without assistance. There was not a farmer with money sufficient to improve this state of things, and proprietors had not the means, either." Can so disheartening a description be given of any part of New England?

Ayrshire now ranks among the most flourishing districts of Great Britain. The increasing demand for dairy produce has created the fine breed of Ayrshire cows, and has changed those ancient heaths into profitable pastures.

The further we go north, richness decreases, but draining, the cultivation of turnips and forage crops, extra manures, subsoil plowing, and liming, everywhere convert frightful mosses and barren rocks into good lands. One might almost call it a second creation. Every day, this part of Scotland is increasing its production of milk and meat. Oats and barley follow the movement; and wheat dares to show itself in the gloomy, cold county of Caithness, where at

one time myriads of sea-fowl were almost sole occupants.

It is perhaps worth while to mention the case of Mr. Mactier, as an instance of the extent to which, and of the faith with which, capital is sometimes embarked in farming in Great Britain. He is an enterprising Englishman, who, having realized a fortune in the East Indies, purchased a property of 22,000 acres of the Duke of Gordon, in Aberdeenshire, which was almost entirely in a state of nature. The price paid was nearly $600,000, and he is laying out $125 the acre, or five times its original cost, in improvements of all sorts. These operations consist, principally, of subsoil plowing. The property being covered with granite rocks, these are blasted and removed. The ground, after being thus cleared, is levelled, drained and limed, and laid out in farms of about 400 acres each. These farms, it is stated, are let for nineteen years, at the rate of five per cent. on the money expended upon them. This is the scale upon which agricultural undertakings are sometimes conducted in Great Britain; for the whole operation, when completed, will absorb between three and four millions of dollars.

The Scotch farmers, with more intelligence than any others of the same class, are careful to undertake only what they can do well. In that country, not only are they not ambitious to become proprietors when they have only capital sufficient to be farmers, but they take care not to rent a hundred acres when they have only capital sufficient to work fifty. They have the sense to live, rather below, than above their income, and do not mind putting their hand to the plow. They prefer in everything realities. False pride has disappeared before the natural good sense of the Scotch. Some in this country might learn a useful lesson by visiting them.

The Highlands, once the land of Clans and Highlanders and warriors, now of romance and poetical associations in the minds of thousands, who know them only through the pages of Scott, are desolate regions, almost destitute of trees, and with scarcely even heather; everywhere steep and naked rocks, streams of water of all sizes, lakes, falls, foaming torrents, immense mosses, perpetual snows, and rain, and violent winds from the North Sea. It seems as if rural economy could have nothing to do with such a country. The old inhabitants, the clansmen and warriors and their descendants, are gone from the land, forced away by means, which none but a nation, rough-mannered like the British people, could have used; and it is now the land of silence and of sheep. It seems as if there were no human inhabitants in it. If the bagpipe is heard, it is the peaceful amusement of a shepherd, who tends five hundred sheep for wages, and knows not the history of the clans, but whether it has been a good lambing season, and how wool is selling. There are immense forests planted by noblemen, and shooting grounds, and fisheries; but sheep, and desolation, and silence, rocks, crags, waterfalls, and heather, romantic views, and romantic associations with the past—these things, and not agriculture, engage the thoughts of a visiter to the Highlands.

M.

The Women of Peru.—Of all the Spanish customs of the olden time, devotion to women is preserved in perfect purity only in Peru. The loving husband, with his ardent, poetic imagination, delights in being the slave of his lady. The fair senoras make the largest demands on gallantry, and the slightest lack of watchfulness often excites resentment which will not be appeased. In company a gentleman approaches a woman only when he can show her some little attention. Above all, her right is supreme to the first places and the strongest expressions of devotion. People do not say here as elsewhere, "I have the honor to present my compliments to you," or, "How do you do?" but, "Senora, I kiss your feet."

"Proposing," in Peru, is very romantic. The suitor appears on the appointed evening with a gaily-dressed troubador under the balcony of his beloved; the singer steps before her flower-bedecked window, and sings her beauties in the name of the lover. He compares her size to that of a palm-tree, her lips to two blushing rose-buds, and her womanly form to that of the dove. With assumed harshness the lady asks the lover: "Who are you, and what do you want?" He answers with ardent confidence: "Thee do I adore; the stars live in the harmony of love, and why should not we, too, love each other?" Then the proud beauty gives herself away; she takes her flower wreath from her hair and throws it down to her lover, promising to be his own forever.

For the New England Farmer.

THE COLT QUESTION.

Mr. Editor:—In the June number of the *Farmer* I noticed an article from the pen of H. Poor, Esq., of Brooklyn, N. Y., a gentleman reported to be a good breeder of horses, in which he says he takes "strong grounds" against my treatment of colts.

The importance of the subject in hand leads me to solicit another corner of your valuable paper, to set the gentleman right, as I perceive that I have been entirely misunderstood in my former communication, and consequently his reasonings on the subject are all drawn from false premises.

I *do say that* I never allow a colt to stand upon a floor before he is two years old, as I believe the practice to be prejudicial to the formation of good feet, and I also agree with the gentleman, that *if* my plan had been to keep my colts upon a plank floor without cleaning from "December till planting time," I should expect that nine in ten thus trained would either die, or become unsound before they were two years old. The gentleman assumes (tacitly) that there are but two plans of stabling colts. The first is his, of keeping them upon a hard clean floor. The second, is my plan, of keeping them upon a large amount of manure in a heating state. While I maintain, and am prepared to show, that the first of these plans is bad, the second worse, while another, which is in fact my method, is safe and infinitely the best of all, and I also "speak from experience, as many of your readers know," though I must confess that I have never experienced the loss of a horse by allowing him "to stand month after month in his own filth," having been warned against the practice more than 40 years ago. With regard to the keeping of colts upon a clean hard floor I shall only say that the practice is condemned by the best horse breeders in Vermont, and from personal experience and observation in these

matters I entertain no doubt but ring bone, contracted hoofs, sprung knees, as well as many other defects in the feet and limbs of horses, are occasioned in most cases by confinement while young, upon plank floors. Hence during the last fifteen years I have discarded plank floors for young colts entirely, and adopted those constructed by the God of nature, and in that I have never raised an unsound horse.

The best stables I have ever seen for young horses is one built without any artificial floor, further than to make the surface even. I prefer box stalls for each colt, of sufficient size to allow the animal to turn himself, lie down, and rise with freedom. No young colt, in my opinion, should be confined in a stall by a halter. Each stall should be thoroughly cleared at least once every day, and clean bedding furnished every day.

Nothing can be more injurious to the health of a horse of any age, than standing in a close stable, in the midst of the ammonia, naturally generated by their own excrements. Cleanliness is said to be next to Godliness, and the maxim should not be forgoten in the stable treatment of growing animals. SOLOMON STEELE.

Derby Line, Vt., Jnne 16, 1856.

For the New England Farmer.

BONE MANURE FOR TURNIPS.

MR. EDITOR:—As the season for sowing turnips is at hand, I will give you the result of an experiment, tried a year or two since for the purpose of testing the relative value of bone and compost manures.

I selected a piece of land gently sloping to the south-east. It had lain in grass for at least fifteen years. The upper part of the lot was very light soil, gradually improving as it descended, to a deep rich loam, and running about one rod into a peaty meadow. On the 21st of July, when the ground was quite dry and dusty, I plowed a strip of this containing a little more than eleven square rods. On one half of this, I spread two loads of compost manure, of fair quality; on the other half, about two-thirds of a barrel of crushed bone, prepared in this manner: I made a lye by dissolving five pounds of potash in a half barrel of water, and put the bone into it, leaving it there perhaps a week. I then mixed this bone and lye with a load of dry peat, pulverized by the previous winter's frost; and after it had lain in a heap a few days, worked it over to mix it more thoroughly. The whole mass was quite warm, and the bone was mostly if not entirely dissolved. These manures were spread and well harrowed in after a light rain, that moistened the earth to the depth of two or three inches, and the turnip seed were sown on the 25th of July, with a seed-sower, each half containing eight rows. Dry weather followed, which, though it did not prevent the germination of the seed, of course hindered the rapid growth of the plant. We hoed once, weeding and thinning out at the same time.

When harvested, the crop on the side manured with bone, measured *fourteen* bushels, of fifty pounds each; that on the composted half, *twenty-one* bushels. I confess to some surprise at this result. My expectations leaned strongly the other way.

The cost of the bone was $2 a barrel in Boston, the potash cost forty cents; so that the expense of manuring that half, was a trifle more than two dollars for about 5¼ rods, or nearly at the rate of $30 per acre. The two loads of compost used, (one-horse loads) would probably be estimated at about the same price, or about a dollar a load.

In conclusion, my experience with various concentrated fertilizers has convinced me that if we would judiciously spend their cost in saving the fertilizers at home, most of us farmers would find our compost heaps largely increased in size and value; in value, much more than the worth of the *shop* manure. M. P.

Concord, Mass., 1856.

LETTER FROM MR. BROWN.

Washington, D. C., June 25, 1856.

DEAR SIR:—In my last letter I alluded, briefly, to recent improvements in this city. The letter was written on one of the hottest mornings the people ever experience here, and amidst various interruptions. I said nothing of the public buildings, of Congress, or of many other matters of public interest. The additions to the Capitol, now in process of construction, are on a magnificent scale, and are, alone, well worthy a visit to the Federal City. A new room for the Representatives is to be completed in the south wing, and a new Senate Chamber in the north wing. The library is to be extended, and include rooms now occupied by the clerk of the House and his assistants. The old Dome which so long braved the elements, and was visited by hundreds of thousands of persons, of nearly all civilized nations, has been taken down, and a rude wooden roof covers the rotunda to keep the rain from the pictures below. The walls of both wings are up, and this morning the workmen are placing the highly wrought cornices on one corner; all about are derricks of huge construction, and on the top of the work is a steam engine of ten horse power to raise the massive blocks of marble to their respective positions. The most perfect system known for ventilating, warming and supplying water, is to be adopted. Under the second story floors there are long ranges of cast iron boxes about two feet wide by twelve inches in hight; these rest upon the tops of the beautiful marble pillars below, and their under sides, ornamented, form the ceiling of the rooms on the first floor, so that the ceiling, instead of mortar, is a series of cast iron plates covered with various devices. Through these boxes we understand that the pure air of heaven is to be urged by a blower, such as is used for forges and furnaces, and to be propelled by a steam engine. In the cold weather the boilers of this engine are to furnish steam for warming by a system of pipes scattered through every part of the building. On the top of this immense pile, may now be seen several huge iron tanks of the common shape of steam boilers, which are intended as water tanks

or reservoirs, to receive the water from the roofs, and thence be conducted wherever it may be wanted for use. To surmount all this the new dome will rise *two hundred feet* above the top of the arch of the rotunda, beginning with rows of wrought pillars at the base, and after rising some twenty or thirty feet, recede, so as to lessen the diameter, then another row of pillars, and so on until nearing the top, when a conical structure with windows for an observatory will afford an unsurpassed view of the surrounding country.

Such are some of the grand outlines. The finer work, that which would attract all persons of taste, may be found in some of the rooms already finished, and in the shops where numerous artists and sculptors are bringing out of the rude blocks of marble the most exquisite forms that can well be conceived. These are to be placed in various parts of the building, on pedestals or niches purposely left for them in the walls.

But the happiest thought of all, carried into the most beautiful and ornate embellishments, may be found in the finish of the single committee room now completed. It is the room, as we were informed, to be occupied by the committee on Agriculture. This room is, perhaps, 20 feet by 18 wide, and to the top of the arched ceiling it may be some 20 feet. It is comfortably and handsomely furnished. The floor is a tessellated pavement, of brilliant colors, and the material is as hard as glass. But it is the walls which strike the beholder with admiration, and, when he has learned the manner in which the gorgeous work before him is executed, with astonishment. On four sides, or planes, of the ceiling overhead, the four seasons are represented by the cornucopia, or horn of plenty, by sheafs of grain, fruits and flowers, and other devices. On one end Cincinnatus is seen as being called from the plow, which he left in the furrow to fight the battles of his country, and with numerous other emblems. All these representations are truthful, and given in most brilliant colors. The pigment used, we are told, is wrought into the mortar itself, so that were a portion of the surface taken off the picture would still remain perfect. Two men, Italians, were employed *three months*, on the ceiling of this single room. We understand that the committee rooms are to be finished in a style emblematical of the business of the committee;—if on Naval affairs, with ships and commercial emblems, if on Public Lands, with prairies, perhaps on fire, or as being fed by herds of buffaloes or, if on Revolutionary Claims, with striking scenes of that eventful epoch, with the old soldier presenting his claim, and the doors of the Treasury thrown open for his relief! Is this the long lost art of the days of Herculaneum and Pompeii, now discovered, that shows paintings buried through centuries, but as fresh as though executed yesterday? We are glad to see this beautiful work going on. It is better thus to appropriate a portion of the public funds than leave them for the scrambling of unscrupulous politicians. We have money, materials and workmen, in abundance, and we trust the National Capitol will not be second, by-and-by, to any structure in the world, in true architectural taste, richness and convenience.

The Treasury department is being extended, and the coarse sandstone of which the original building was constructed, has been painted with some soft color, so that the eye rests pleasantly on it. The Patent Office, of white marble, is also receiving great additions, and is destined to become a magnificent structure.

Many New England people are here looking in upon Congress, at the public buildings, or catching the excitement of the day. But I must close. The heat is intolerable, and my letter will be, if I spin it longer. Truly yours, Simon Brown.

Joel Nourse, Esq., Boston.

DOINGS AT THE PATENT OFFICE.

In a recent letter from the Washington correspondent of the Boston *Journal*, are some interesting statements of operations at the Patent Office, a portion of which may be found below. It affords us pleasure to find attention given to agricultural matters by such influential papers as the *Journal*, and its intelligent correspondent. We more than half suspect that the proprietor of "Indian Hill Farm" speaks through the *Journal*, and that he finds more pleasure in rural affairs than in the political turmoil at Washington. But to the extract. He says:

"Recently your correspondent paid a visit to the Patent Office, the never-failing subject for amateur letter-writers. Few of them, however, discover the 'Agricultural Bureau,' which is gradually attaining an importance worthy of the interest which it was instituted to aid. An appropriation of $30,000 has already been made by the present Congress, and a further appropriation of $70,000 will be asked for in a few weeks—making $100,000 for the present year, besides cost of printing, binding, packing and transporting 210,000 copies of the anual report. A sketch of the present operations of the Bureau may not be uninteresting.

About twenty thousand dollars are to be expended for seeds and cuttings, some of which are already purchased. Take, for instance, turnips; last year twenty varieties of English turnip seed were distributed for experiment; from these, eleven varieties were approved, and forty bushels have arrived in New York; they will reach here in a week, and be immediately distributed. At the same time the Bureau will receive four hundred bushels of peas, and seven hundred pounds early York cabbage seed.

One thousand bushels of wheat have been ordered from the Mediterranean, with approved varieties of barley and rye. This wheat will be distributed with especial reference to experiments in

'cross fecundation,' by which it is thought new and valuable varieties of wheat can be established.

Dr. Parker, U. S. Commissioner to China, is to make an excursion this summer to the northern portion of the 'flowery kingdom,' and has one thousand dollars placed at his disposal for the purchase of seeds there.

Hay is our most valuable crop, yet some of our imported grasses have become much deteriorated, and the real value of many native varieties is unknown. Mr. W. T. Dennis has been commissioned to visit every State, report on its grasses, both native and foreign, and procure seed for distribution. When seed has been procured, experiments will be instituted with a view of ascertaining what grasses are most lasting, most prolific, and most nutritious for stock, in each county of the Union. This is a gigantic task, but one which promises important results.

Townsend Glover, whose models of fruit are well known in Boston, has been sent to Iowa, to examine the insects injurious to the wheat crop. It is expected that Congress will make an appropriation, enabling him to perfect his collection of artificial fruit, vegetables, &c.

Dr. C. T. Jackson, of Boston, is permanently engaged in chemical experiments of agricultural value. One of these has proved that oil worth seventy-five cents per gallon can be extracted from cotton seed, (hitherto worthless) leaving a cake worth three cents per pound. Another analysis shows that the cob of Indian corn only contains three and a half per cent. of nutritive matter. Experiments are to be carried on, determining the comparative amount of nutriment in cereals—the amount of tannin in barks and other materials—the amount of phosphoric acid in the worn-out soils of the Atlantic as compared with the virgin soils of the West, &c., &c.

The above paragraphs will give the readers of the *Journal* an idea of the value of the 'Agricultural Bureau' to the yeomanry of our land. The director, D. Jay Browne, Esq., is a native of Exeter, N. H., and admirably qualified for his task."

NATIONAL CHARACTERISTICS.

It has been said that men will betray the characteristics of their nation in their conversation. It chanced that this point was under discussion by a group of passengers and the captain of one of our clipper ships, during a recent passage across the Atlantic. It was a fine day, and most of the passengers, both cabin and steerage, were upon deck. The group above mentioned had been commenting upon the bluntness of the English, cautious shrewdness of the Scotch, and the ready wit of the Irish, when the captain, taking the segar from his lips, pointed towards the forward part of the ship, where, at different points, he indicated a native of each of the three nations. He then proposed to wager that he would ask each of them the same question separately, and that the answer of each would be an illustration of his national characteristic. This proposition being acceded to, it was decided that the question should be, "What will you take to climb to the masthead!" and the party moved forward to put the experiment to the test.

The first one accosted was the Englishman, who was slowly pacing the deck. "John," said the captain, "what will you take to climb to the masthead?" John glanced upwards an instant, and then exclaimed with characteristic bluntness, "I'll take five pound." A smile from the group proclaimed the success of this trial.

The Scotchman was next approached; he was a sandy-complexioned, sharp-eyed fellow, and was seated upon a sea-chest, darning a rent in an old pair of pantaloons. "Sawney," said the captain, jingling the silver in his pocket as he approached him, "What will you take to climb to the masthead?" Sawney's ears pricked up at the sound of the coin, and as he slowly and cautiously measured the height with his eye, without rising from his seat, he replied, with the shrewdness of a true Scotchman, "I dinna ken, mon; what'll ye gie?"

The last one approached was the Irishman, who was carelessly leaning over the bulwarks, humming one of the lively melodies of his country; his old battered *caubeen* was cocked jauntily over his right eye, while his left was employed in executing a series of expressive winks at a group of the female steerage passengers who were upon the other side of the deck—"Pat, my boy, what will you take to climb to the mast-head?" asked the captain. Pat's blue eye twinkled as he turned it upward, and a look of irresistible comicality played upon his phiz, as he replied, *"Shure I think I'd take a bad cowld, intirely."—Traveller.*

For the New England Farmer.

IN REGARD TO CAPT. SYMMES' HOLE.

Mr. Editor:—In reply partly to Mr. I. Stearns' questions relative to the time the venturesome captain lectured upon the "theory of this earth's being hollow," "whether his lectures were ever published," &c., &c., I will give him what information I possess upon said matter, premising he will find the same correct, as I glean it from a *bona fide* publication of the year 1818, which appears from the work in question, to be the period at which Capt. S. flourished.

Whether his "lectures" were ever published or not, is more than I have the means of telling; if they were, they were probably the earliest edition of "curtain lectures," and had but a slight circulation among the literati in this quarter of the country.

The following is a copy of a document issued by him at the time:

"CIRCULAR.

Light gives light, to light discover—*ad infinitum.*

St. Louis, Missouri Territory, North America, April 20, A. D. 1818.

TO ALL THE WORLD.

I declare the earth is hollow and habitable within; containing a number of solid concentric spheres, one within the other, and that it is open at the poles twelve or sixteen degrees. I pledge my life in support of this truth, and am ready to explore the hollow, if the world will support and aid me in the undertaking.

John Cleve Symmes, of Ohio.

N. B. I have ready for the press a 'Treatise on the Principle of Matter,' wherein I show proofs of the above positions, account for various phenomena, and disclose Dr. Darwin's golden secret. My

terms are, the patronage of this and the new worlds. I dedicate to my wife and her ten children. I select Dr. S. L. Mitchell, Sir. H. Davy, and Baron Alexander de Humboldt as my protectors. I ask one hundred brave companions, well equipped, to start for Siberia, in the fall season, with reindeer and sleighs, on the ice of the frozen sea. I engage we find warm and rich land, stocked with thrifty vegetables and animals, if not man, on reaching one degree northward of latitude 82°. We will return in the succeeding spring.

J. C. S.

To His Excellency Gov. Wm. Clarke."

Without further personal information in regard to the movements of the captain, and not wishing to treat a really serious matter in any other way than with the importance the subject demands, I will merely add, that years ago, when a wanderer on the "deep, deep sea," in the solemn lonesomeness of a ship s forecastle, Capt. Symmes' name used often to be mentioned, in connection with the blowing of the North West winds, at times particularly when their prevalence made "going aloft" anything but an amusement.

It was the common and believed report then, among seamen, that Capt. Symmes had been to the North Pole, and discovered a hole, which up to the time I speak of had been familiarly known as "Symmes' Hole;" one of Capt. S.'s crew on their return reported that the aperture discovered was the one whence issued the North West winds, and that the discovery was an accidental one of the captain's, he having one day shinned up to it divested of his coat and jacket; and had either of those articles been within his reach, he would have closed the hole, (it being very small.)

Could he have only succeeded in so doing, I am sure he would have had the prayer of many a seaman as well as landsman, and no more fervent one than would have been offered by.

J. P. T. Shiver.

Winchendon, Mass., June 21, 1856.

For the New England Farmer.

PROTECT THE BIRDS.

Very few persons indeed appreciate the field birds as highly as they ought. By far too many look upon the feathered tribe as mere tenants of the air, having no specific duties to perform; or as creatures enjoying an existence merely, without being of any possible profit or pleasure to man.

Such a mean appreciation of their inestimable worth, is perfectly absurd, not to say preposterous. Can a man's heart be so hard and adamantine like, as not to be touched and awakened to a livelier unison even, by the sweet music discoursed by the feathered songsters, from hill-top and glen?

Surely, their music is sweeter than that of the harp, and contains a vivacity which no human breath or hand can impart.

But birds were not given us for pleasure only; they were intended to aid and assist us likewise.—And this they do most effectually, by destroying innumerable insects which would be injurious and destructive to vegetable growth.

Such birds as the robin, the blue bird, the linnet, and the wren, are both pleasurable and profitable. But let us now come to the most remarkable and peculiar of all birds—the king bird. All, I hope, are familiar with his form, his beauty, his habits, and his unsurpassed usefulness.

Who is not acquainted with the compactness of his form, with the masculine contour of his head, and lastly, with the peuliar formations of his beak, and also with the efficient and cunning manner in which he uses his sharp, and even deadly weapon?

How many a heart has rejoiced in Spring time, to see this little monarch of birds rearing his nest among the thick branches of some favorite old apple tree, near the farm house or barn.

How well-assured have the inmates felt, that, if the king bird took up his habitation near the farm buildings, no marauding hawk would dare to molest the sanctity of the hen-coop.

How well satisfied were they that no plundering crow would dare venture among the thick boughs of the stately elm overhanging the dwelling, to rob the red-breast robin's nest of all that was so dear and hallowed to the mother bird.

Truly, the king bird is no negligent or careless watchman, neither is he a cowardly assailant. He stands ever upon his guard, and when duty requires, he is vigilant and brave to attack. Indeed, I never realized the actual worth of the king bird until the present season. My corn field is situated about one hundred rods from the house, and greatly exposed to the ravages of the crows.

This field is large, and in it stand a few veteran apple trees—the remainder of a once valuable orchard. To my great joy, I noticed early in spring time, that two pairs of king birds had selected places for building their nests among the boughs of these trees.

From what I previously knew of the king bird, I was at once constrained to believe that the bird would be of great value to me in keeping off the crows.

My expectations have been realized, for, during the week past, I have noticed several times that an old crow attempted to enter the field, but was promptly met at the outer limit, and immediately repulsed by my faithful guard.

My cornfield has remained unmolested by the crows, although in a very exposed position, and I attribute its preservation to the vigilance of the king bird.

A thousand times have I thanked the bird for his watchfulness, and as often blessed the maker of all things for so glorious a gift.

Farmers, see to it that the birds are preserved, and they will a thousand times pay you for your care concerning them.

J. T. J.

Leominster, Mass., 1856.

Rose Cuttings.—When is a good time to root rose cuttings, and how, and in what soil?—G. Sherma, *Huron Co., O.*

In the summer, choose a shady place—the north side of a wall or building is best, and prepare a soil from four to six inches deep, nearly all sand; pit sand will do. A frame and glass is desirable, although they will root in the open soil if kept moist and shaded from the sun. In selecting the cuttings, choose the short-jointed wood, usually that from which the flowers have recently fallen, taking a portion of the heel, or attachment to the larger shoot, with it. These being in what is called a half ripe state, remain green sufficiently long to en-

able the base to callous over, after which the roots are quickly produced; it may be known by its commencing to grow. The cutting is then a perfect plant, and ready for potting off. For a few cuttings, flower pots may be used, with bell or hand glasses to cover them. Those kinds which flower more or less all the summer, as China and Bourbons, strike very readily in the spring or fall, or indeed at any season; the hybrid perpetuals best perhaps after the midsummer flowering, while the last named are more usually propagated, as are also all kinds of June or summer roses, by layers in the spring, from the greater difficulty in the rooting them from cuttings. The cuttings should be inserted about half their depth in the soil.—*Country Gentleman.*

For the New England Farmer.

KEEPING DOGS.

Mr. Editor:—As your paper is in part devoted to the subject of raising and keeping stock, and as there is one *kind* of stock which can be easily shown to be not only unprofitable, but absolutely detrimental to the interests of our country, perhaps a few words on that subject might be acceptable.

A race of animals called dogs, considered by some indispensable, and yet in reality, such a nuisance, I would look at in the light of economy.

Now it is readily admitted that in some kinds of business a dog may be useful and even necessary, but I venture to say that in three cases out of four, they are infinitely worse than useless.

The farmer says a good dog is useful on the farm to protect his crops against the depredations of his neighbors' cattle, and to protect the lambs and poultry from the foxes and other wild animals, and his clover from the wood-chucks. I think no man deserves the appellation of "farmer," who needs a dog to protect his crops, and if we turn our sheep with young lambs into back pastures on our wild mountain farms, it is very few lambs that will be saved by the dog, and if, like some of our more prudent farmers, we keep them in a small lot near the barn, there is certainly no need of such a sentinel. The wood-chucks have done me some damage, but not one-fourth part as much as my neighbors' dogs and boys in tramping down my crops, and tearing down my stone walls.

The mechanic, the doctor, the lawyer and many others have no pretext whatever, only that "a good dog is a good thing, and it costs nothing to keep him," and "I like a good dog, and so I keep him." Well, now, how is it about the cost of keeping him? I notice when I go into a neighbor's house at the close of a meal that the good man or lady fills up a large plate with rich food for the dog, sufficient in quantity, if fed to the pig or the poultry, to amount, at least to $5 a year; I think $10 a year would be nearer the truth. Take the neighborhood where I live for a sample. We have one dog to every ten persons, or 272,811 in the New England States. What an army of dogs!

Supposing one in four to be really useful (which is the most I can possibly admit) and we have 204,608 useless dogs to support at a cost, according to the lowest estimation, of $1,032,040. So much for the economy,—and now a few words for the convenience.

I have no disposition to abuse any dumb animal, and if I kept a dog, I should, like most others, suffer him to lie on the kitchen floor by the stove; but if my wife, in doing her work, was obliged every five minutes to step over or go round and kick out of the way a great lazy dog, I should expect her smiles would be few and far between, to say nothing of the disgust one feels when knocking at a neighbor's door to have the inmates obliged to wage a war of extermination with the dog before they can let us in and then ten to one but the first salutation will be from the gentleman with four legs.

H. Briggs.

Fairhaven, Vt.

EXTRACTS AND REPLIES.

PLASTER, OR GYPSUM.

There is much said of the value of plaster. As I have a variety of land, I thought plaster might suit some of it. I can buy it at my door at 70 cents per hundred. You would much oblige a subscriber by informing me of the use of it, i. e. kind of land, how applied to a hoed crop, at the time of planting or weeding, and quantity per acre, on run-out grass land, and season of year?

West Windsor, Vt., June, 1856. T. S. P.

Remarks.—In a case like yours where you possess a variety of soil and have no particular knowledge of the action of plaster, we think the true course is to make an experiment on each kind of soil by applying the same amount of plaster to one or more square rods of ground, and carefully noting the result.

On soils that already contain a sufficient quantity of the sulphate of lime, little or no effect will be observed; while in those that are deficient in this element, but abounding in others necessary to the plant, the application of plaster will produce the happiest results.

Light, dry, sandy, or open soils, as they are sometimes called, are those upon which plaster generally operates the best—because the rain water readily dissolves and conveys it to the roots of plants.

—

WIRE FENCE AND PLANTS.

Mr. Editor:—Is the *wire fence,* as manufactured and varnished by J. E. Butts, Jr. & Co., injurious to the vine or fruit, when used as a trellis for the grape? If injurious, would the difficulty be obviated by applying a coating of white paint, or is it the material that injures? W. P.

Remarks.—We have heard no complaint before, and do not think any varnish used would be injurious to plants in the open air.

—

PLUM TREE—20 FEET GROWTH IN A SEASON.

You ask if "I. T. W. does not mean twenty *inches* instead of twenty *feet* that grew in one year." I am not in the habit of telling *"large stories,"* nor would I have the name of *"stretching the truth"* for all the plums in New England; and when I stated that a single plum scion grew in one year only some four or five inches less than twenty feet, I meant just what I said—or in other words, not to

be too precise, I mean over *nineteen feet* and *six inches*. I stated the simple fact—if it seems incredible it is open for inspection. There were three shoots from the scion, one over seven feet, and one over six feet, and the other about five feet, with two or three side shoots from these, all from a single scion. Will that answer? L. T. W.

Marlboro', N. H., June, 1856.

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THE CANKER WORM.

FREDERIC HOWE, *Danvers, Ms.*—Tarring the trunk of a tree is the remedy generally resorted to, in order to prevent the female, who cannot fly, from ascending the tree. We know nothing of the experiment to which you refer of digging the ground several times in the season, and especially just before it freezes. The worm descends into the ground from two to six inches, according to the nature of the soil.

MR. GREGORY, of Marblehead, in our volume for 1855, page 549, details a plan which has been successful, and to which you are referred.

—

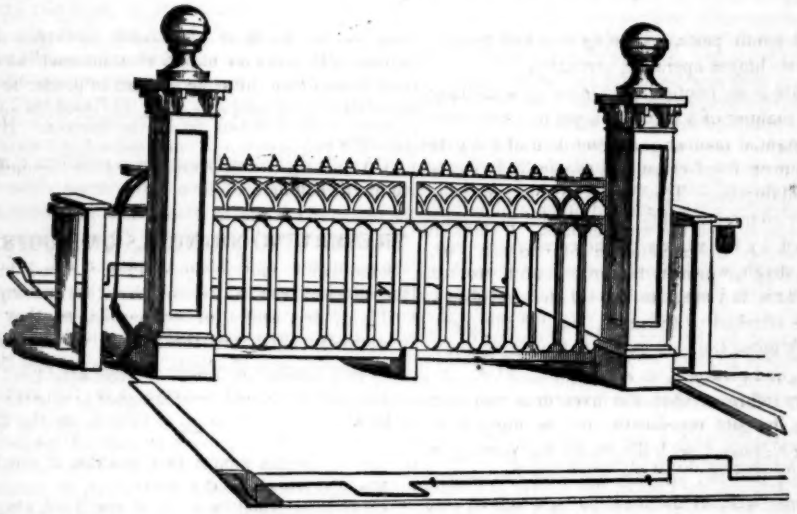
MAGGOTS ON BEET LEAVES—LICE ON TREES.

Can you, or your correspondents, inform me how to preserve beet leaves from the ravages of the maggot? When it first came upon our beet leaves, we thought it was a blight, but upon close examination we found it to be a maggot in the leaf between the two skins.

Do you know of any thing that will kill lice upon apple trees without injuring the tree? By answering the above in the Monthly *N. E. Farmer*, you will much oblige a SUBSCRIBER.

Dartmouth, Mass., June 19th, 1856.

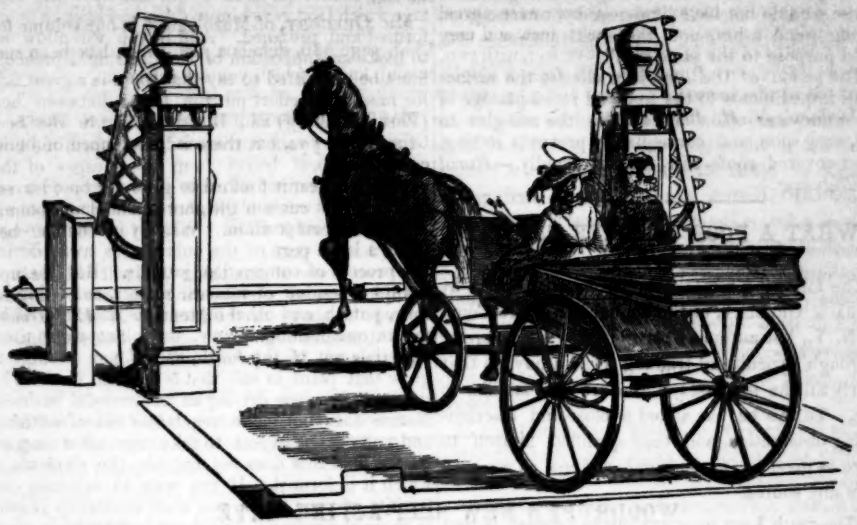
WOODRUFF'S NEW SELF-ACTING GATE.



THE GATE AS IT APPEARS, CLOSED.

These illustrations of a gate are not presented as particularly designed for ordinary farm use, but for front gates, and other important places. A gate of this kind opening upon a highway where neighbors persist in turning their cattle at large, must be exceedingly convenient. With the common gate one must either have a person go to it and open and close it, or get out of the carriage, hitch the horse, if he be a restive one, then drive him through, hitch him again, and close the gate before he can go on. This sort of tax we have been subjected to for some years, and can, therefore, appreciate the value of a self-opening and closing gate.

Mr. Woodruff sometime since obtained a patent for an improvement in farm and ornamental gates, and a full-sized working gate was on exhibition at the late fair of the American Institute, at the Crystal Palace, New York. Those who witnessed the operation of that gate, expressed themselves highly pleased with it, but experience has demonstrated that self-acting swing gates are objectionable, from their liability to damage by heavy gusts of wind and gales. To remedy this and other defects, Mr. W. has invented the gate represented in the annexed engravings, and has made an application for a patent, through FOWLER & WELLS' Patent Agency, of 308 Broadway, New York city. This gate does not swing horizontally, but is composed



THE GATE AS IT APPEARS, OPENED.

of two separate parts, one being attached to each post by two hinges operating vertically.

The gate is so jointed as to close up something after the manner of a lady's fan, yet in a very firm and substantial manner. As each half of the gate is but four or five feet long, it can easily be made strong and durable. This gate is balanced upon its hinges by counter weights beyond the posts, and is operated by the wheels of the carriage or runners of a sleigh, which moves the rod over which it passes. This rod operates the side bars or chains, which are attached to the cranks outside the posts, and which move the gate as desired, opening it on approach, and closing it on leaving.

We are informed that the inventor is prepared to deliver the gate represented in the engravings, boxed for shipment, with directions for putting it up, so plain that any ordinary mechanic can understand them—without the main posts, which can be constructed to suit the taste of the applicant—for $35, which is less than it could be manufactured for without the labor saving appliances possessed by him.

Any orders may be addressed to FOWLER & Wells, or to the inventor, at Elizabeth City, N. J.

FRENCH SURGERY. — The following anecdote, told of Sir Astley Cooper, is a fine illustration of the difference between the French and English mind; the one content with outward display, the other only with substantial fruit.

On visiting the French capital, he was asked by the surgeon *en chef* of the empire how many times he had performed a certain wonderful feat of surgery. He replied that he had performed the operation thirteen times. "Ah, but Monsieur, I have done him one hundred and sixty times. How many times did you save his life?" continued the curious Frenchman, after he looked into the blank amazement of Sir Astley's face. "I," said the Englishman, "saved eleven out of the thirteen. How many did you save out of one hundred and sixty?" "Ah, Monsieur, I lose dem all, but de operation was very *brillante!*"

PRESERVING SHINGLES ON ROOFS.

Some paint roof shingles after they are laid. This makes them rot sooner than they otherwise would. Some paint the courses as they are laid; this is a great preservative, if each shingle is painted the length of three courses. But about as sure a way to preserve shingles, and that with little or no expense, is a mode recommended in a letter to us by Hon. David Hunter, of Clinton, on the 23d of Feb. last. We republish so much of his letter as relates to this subject, in hopes that it may be of service to many of our readers.

"There is one thing more, that nearly all people know, if they would only attend to it; that is, to sprinkle slaked lime on the roofs of their buildings, in rainy days. Put it on considerably thick, so as to make the roof look white, and you never will be troubled with moss, and if the shingles are covered ever so thick with moss, by putting the lime on twice, it will take it all off and leave it white and clean, and will look almost as well as if it had been painted. It ought to be done once a year, and, in my opinion, the shingles will last almost twice as long as they will to let the roof all grow over to moss. I tried it on the back side of my house ten years ago, when the shingles were all covered over with moss, and they appeared to be nearly rotten. I gave the roof a heavy coat of lime, and have followed it nearly every year since, and the roof is better now than it was then, and to all appearance, if I follow my hand, it will last ten or fifteen years longer. The shingles have been on the roof over

thirty years. There is no more risk about sparks catching on the roof than on a newly shingled roof. Those who do not have lime near by, can use good strong wood ashes, and these will answer a very good purpose to the same end."

The action of the lime is to cleanse the surface of all impediments to the free and rapid passage of the rain-water off. This enables the shingles to dry, very soon, and consequently prevents rotting. Moss-covered roofs will rot very rapidly.—*Rural Intelligencer.*

WHAT A POOR FARMER CANNOT AFFORD.

The following remarks are from an Address by Horace Greeley, at the annual fair in Ere County, N. Y., last autumn. Mr. Greeley had a pretty thorough agricultural training while a boy, so that nearly all the processes of the art are familiar to him. To this he has added a close and discriminating observation, and thus qualified himself to write as good an agricultural address as we read from any source.

"The truth I am most anxious to impress, is that no *poor* man can afford to be a poor farmer. When I have recommended agricultural improvements, I have often been told, 'this expensive farming will do well enough for rich people, but we who are in moderate circumstances can't afford it.' Now, it is not ornamental farming that I recommend, but profitable farming. It is true that the amount of a man's capital must fix the limit of his business, in agriculture as in everthing else. But however poor you may be, you can afford to cultivate land well if you can afford cultivate it at all. It may be out of your power to keep a large farm under a high state of cultivation, but then you should sell a part of it, and cultivate a small one. If you are a poor man, you cannot afford to raise small crops; you cannot afford to accept half a crop from land capable of yielding a whole one. If you are a poor man you cannot afford to fence two acres to secure the crop that ought to grow on one; you cannot afford to pay or lose the interest on the cost of a hundred acres of land to get the crops that will grow on fifty. No man can afford to raise twenty bushels of corn to an acre, not even if the land were given him, for twenty bushels to the acre will not pay the cost of the miserable cultivation that produces it.

"No poor man can afford to cultivate his land in such a manner as will cause it to deteriorate in value. *Good* farming improves the value of land, and the farmer who manages his farm so as to get the largest crop it is capable of yielding, increases its value every year.

"No farmer can afford to produce weeds. They grow, to be sure, without cultivation; they spring up spontaneously on all land, and especially rich land, but though they cost no toil, a farmer cannot afford to raise them. The same elements that feed them, would, with proper cultivation, nourish a crop, and no farmer can afford to expend on weeds, the natural wealth which was bestowed by Providence to fill his granaries. I am accustomed, my friends, to estimate the Christianity of the localities through which I pass, by the absence of weeds on and about the farms. When I see a farm covered by a gigantic growth of weeds, I take it for granted that the owner is a heathen, a heretic, or an infidel—a Christian he cannot be, or he would not allow the heritage which God gave him to dress and keep, to be deformed and profaned. And if you will allow me to make an application of the doctrine I preach, I must be permitted to say that there is a great field for missionary effort on the farms between here (East Hamburg) and Buffalo. Nature has been bountiful to you, but there is great need of better cultivation.

"Farmers cannot afford to grow a crop on a soil that does not contain the natural elements that enter into its composition. When you burn a vegetable, a large part of the bulk passes away during the process of combustion into air. But there is always a residue of mineral matter, consisting of lime, potash, and other ingredients that entered into its composition. Now, the plant drew these materials out of the earth, and if you attempt to grow that plant in soil that is deficient in these ingredients, you are driving an unsuccessful business. Nature does not make vegetables out of nothing, and you cannot expect to take crop after crop off from a field that does not contain the elements of which it is formed. If you wish to maintain the fertility of your farms, you must constantly restore to them the materials which are withdrawn in cropping. No farmer can afford to sell his ashes. You annually export from Western New York a large amount of potash. Depend upon it there is nobody in the world to whom this is worth so much as to yourselves. You can't afford to sell it, but a farmer can well afford to buy ashes at a higher price than is paid by anybody that does not wish to use them as fertilizers of the soil. Situated as the farmers of this county are in the neighborhood of a city that burns large quantities of wood for fuel, you should make it a part of your system of farming to secure all the ashes it produces. When your teams go to town with loads of wood, it would cost comparatively little to bring back loads of ashes and other fertilizers that would improve the productiveness of your farms.

"No poor farmer can afford to keep fruit trees that do not bear good fruit. Good fruit is always valuable, and should be raised by the farmer, not only for market, but for large consumption in his own family. As more enlightened views of diet prevail, fruit is destined to supplant the expensive quantities of animal feed that are consumed in this country. This change will produce better health, greater vigor of body, activity of mind, and elasticity of spirits, and I cannot doubt that the time will come when farmers, instead of putting down the large quantities of meat they do at present, will give their attention in autumn to the preservation of large quantities of excellent fruit, for consumption as a regular article of diet, the early part of the following summer. Fruit will not then appear on the table as it does now, only as dessert after dinner, but will come with every meal, and be reckoned a substantial aliment.

"No poor farmer can afford to work with poor implements, with implements that either do not do the work well, or that require an unnecessary expenditure of power. To illustrate this, it will be necessary to ask your attention to the nature and office of the mechanical operation requisite for the production of good crops. It is essential to the thrifty growth of a plant that the air should have free access to every part of it, the roots as well as

the leaves, and that the soil in which it grows should be moist, but not too moist, and should have a certain degree of warmth. These necessities of vegetation will enable us to understand the mechanical operations on the soil demanded by good farming.

"The soil should be light and be finely pulverized, in order that the little fibres sent out by the roots in search of nourishment may be easily permeated in all directions. It should be porous to be easily penetrated by air and water, and as its own weight and the filtering of rains tend constantly to bed it down into a compact mass, it needs frequent stirring."

THE CLOVER.

The surface of the earth at this time is almost everywhere covered with that rich, beautiful and fragrant plant, clover, of one kind or another. It covers broad fields, waiting for the scythe, and meanwhile scattering its fragrance over towns and villages; it springs in wide pastures, dots the hills where sheep roam, checkers the valleys where cattle graze and perfumes them with its sweet breath. From it bees are busy laying up stores of honey which may yet come to our tables. The dusty way-side and the crevices in the dry rock are redolent of the clover blossoms, and the bleak bank and deep excavation of the railroad track are cheered with its beauty and fragrance too. It is not a new setting of gems in the sweet grass, but a multiplication of them, with fresh brilliants added. It comes to us daily, not only on our senses, but to our physical nature, in the golden butter, tender sirloins or lamb; in the cream for our fruit and ices, and grateful milk during the fervid heat!

"The clover is every where," people say, "and how came it there?" Fields at hand are now so thickly covered with it that it can no longer stand. But those fields were not seeded by man. Last year some of them were sowed with oats that are now dense with clover alone; and so it is with pastures, and even some low grounds where clover has rarely, if ever, been seen before. It is every where. Grows in the garden and corn field. Here, holds up its modest head in the hot highway, and there, looks clean and prim by the spring, or laves its blossoms in the cool brook as the limpid waters pass along.

Well, welcome, welcome, to the clover, for it sheds innumerable blessings on us, for, with the other grasses it forms the basis of agriculture. No wonder the Flemings said, that "without clover, no man in Flanders would pretend to call himself a farmer." The introduction of clovers, and the cultivated grasses, is one of the greatest improvements in modern husbandry. The commencement of improvements in the different species of live stock, in the mode of cultivation, and in the superior quality, as well as quantity, of the crops of grain, may be dated from the period when the sowing of clovers and grass seeds was generally introduced.

But where have the clovers come from now, appearing so suddenly and so universal in extent? We cannot tell—can you?—but our theory is, that their present appearance in such quantity, making the earth rich and lovely, is the effect of the drouths of 1854 and '55. During those seasons, not only the surface of the earth became as dry as a puff ball, but in digging some eight or ten feet, scarcely a handful of moist earth could be found. It was then that the secret stores of the earth were called on to supply the enormous evaporation from the surface. The moisture from below came up, bringing with it the minerals in its way, and among them something—perhaps the sulphate of lime—having an affinity for clover seeds and put them into an active condition; they germinated and grew and covered the earth with their foliage, fragrance and flowers.

If this theory be a plausible one—or if it is not—drouths have their office to perform as well as winds and showers and storms. Indeed, we have no doubt of the fact; and though they wasted our fields, and the water-courses were dry, and cattle went weary and thirsty to their parched valleys, and returned to their heated stalls hollow and thin, yet they were carrying on the operations of that wise and Omnipotent Power who always knows what is best.

It is our theory that the same causes—that is, the introduction of mineral substances from below—that ruined so many wells after those drouths, and that contaminated the Cochituate water, whereby tens of thousands were deprived of the pure beverage, bring this abundance of clover, and may feed innumerable other plants for years to come, for the benefit of both man and beast.

We cannot now pursue the suggestions that crowd upon us, but some of our learned and observing correspondents, may do the agricultural world, at least, a favor, by giving the subject some investigation.

SQUIRREL NAVIGATION.

The instinctive ingenuity of animals almost equals the deductions of the human reason. We have read of an ingenious device of a company of monkeys to cross a narrow stream, by uniting their tails firmly together, and swinging across from a high tree on one bank, to a tree on the opposite bank, but we have never before heard of squirrel sagacity in fording a wide stream. We take the incident from the *Presbyterian:*

"What I am going to relate appears so extraordinary, that were it not attested by numbers of the most creditable historians, among whom are Klein and Linnæus, it might be rejected with that scorn with which we treat imposture or credulity; however, nothing can be more true than that when these animals, in their progress, meet with broad rivers and extensive lakes, which abound in Lapland, they take a very extraordinary method of crossing them. Upon approaching the banks, and

perceiving the breadth of the water, they return, as if by common consent, into the neighboring forest, each in quest of a piece of bark, which answers all the purposes of boats for wafting them over. When the whole company are fitted in this manner, they boldly commit their little fleet to the waves, every squirrel sitting on its own piece of bark, and fanning the air with its tail, to drive the vessel to its desired port. In this orderly manner they set forward, and often cross lakes several miles broad.—But it too often happens that the poor mariners are not aware of the dangers of their navigation; for although at the edge of the water it is generally calm, in the midst it is generally turbulent. There the slightest additional gust of wind oversets the little sailor and his vessel together. The whole navy that but a few minutes before rode proudly and securely along is now overturned, and a shipwreck of two or three thousand sail ensues.—*Goldsmith.*

Goldsmith is not regarded as very good authority in matters of Natural History. His *Animated Nature* has more than one pleasant fable. As to the squirrel story, although rather marvellous, we can say that it has had its counterpart in this country. Many years ago, when on the banks of the Ohio, we were told that on a certain occasion a woodman, who had split and piled on the shore some thousand shingles, found that during the night the pile had disappeared, and the shingles were scattered on the opposite shore. On inquiry, he discovered that a troop of emigrating squirrels had *borrowed* his property to ferry themselves across the river. So said an eye witness. We do not vouch for the fact.—*Eds. Pres.*

REMEDY FOR THE BORER.

Mr. Tucker:—With your approval, the following prescription is most respectfully and with great pleasure dedicated, through your valuable paper, to the New York State Agricultural Society.

Sure and total destruction to the Apple, Quince and Peach Borer; and at the same time a decided stimulant and safe fertilizer to the tree.

Make a concave mound of mellow earth around the tree, rising about six inches above the work of the insects. Thoroughly saturate this mound with a strong common salt brine, twice, at an interval of four weeks, at any time of the year when the ground is not frozen; stale beef or pork brine, in its full strength, is just the thing. The mound of earth holds the liquid in suspension, round the tree, until by capillary attraction it is carried into the holes and burrows of the insect—where the salt is sure destruction to every grade of this ravaging and pestilent enemy. Vary the quantity of the dose with the size of the tree. Be cautious with small trees. Old, large trees, three feet round, may have a pailful at a time.

I have revived trees by this application from apparent death. Apple trees, 30 years old, with their trunks perforated very badly, are now perfectly healthy, and their wounds are healing over. Two Golden Sweetings, 8 years old, last June withered and showed signs of death. On examination I found the trunks full of borers, and more than half the surface eaten off. I made the application twice. Both trees revived, and made new wood the same season. This spring, I have treated every other tree with the application. These trees are in bloom and the wounds made by the insect are rapidly healing over. I would not now, without trial, recommend the application to any other than the apple, quince and peach. N. S. Smith.

Buffalo, N. Y.—Country Gentleman.

For the New England Farmer.

POPULAR ERRORS.

Mr. Editor:—In this age of improvement and innovation, when we behold the utmost rivalry displayed in the scientific and literary world, new inventions of every kind being brought into existence every where around us, new plans for the alleviation of human misery continually developed, academies and colleges founded on new and improved principles, arising in every city and large village, for the purpose of furnishing the means of instruction to the children and youth of our populous places,—what systematic, thorough, well developed efforts are being made to improve and amplify the education of the laboring classes? The question has often been discussed at great length, what kind of an education is most suitable for farmers, and has never been decided. The term education in its abstract and unlimited sense, implies an understanding of every branch of learning taught, but in its common use means a proper instruction in all the branches of learning and business which one is called upon to perform. It is an old and time-honored error that farmers need but little learning, and hence the expression which we often hear used by even respectable farmers, "I have several sons; one I intend for a profession, he must go to college; another I intend shall learn a trade, I shall send him a year or two to the academy; but the other is going to be a farmer; the privilege of the district school will be enough for him, he will never have much use for learning." My dear friend, you are making one of the greatest mistakes possible. That son, whom you are intending shall become a farmer, is entering upon a profession requiring for its successful accomplishment the best of learning, talent and judgment. It should be your first care to give a thorough and perfect understanding of mathematical science, and its various applications. In fact, the education of a farmer must be of the most comprehensive and thorough nature.

But perhaps we hear an old and respectable farmer say, "For my part, I cannot see the use of so much learning. I have lived to the age of sixty years or more, without any more education than what I obtained at the old district school-house, and I feel as contented as though I had been through college." Very well, my friend, but where are those healthy, active boys that I saw a few years ago, playing about your door? "Why, my boys did not seem to like farming enough to choose it for their business. One said it was not profitable enough, another that it was too hard and dirty, another that there was not opportunity for reading and study. Therefore, one has gone to California, the other, next older, is learning a trade, and I could keep the youngest only by sending him to an academy for two or three years. And since he has come home from school, he has so many new-fangled notions that I scarcely know what to do with him." Thus we see how it is, although we will admit, that many farmers live to a good old age, and die hap-

py; yet it is a hard matter to convince the rising generation that agriculture is honorable, when it is represented only by men of but meagre literary and scientific attainments, and possessing a rough and unrefined exterior. For it is an undeniable fact, that a business is respected according to the character of the individuals engaged in its prosecution. EULER NORCROSS.

South Hadley, 1856.

GEN. OLIVER'S ADDRESS.

In the paragraphs below we give a part of the Address of Gen. H. K. OLIVER, of Lawrence, Mass., before the York County Agricultural Society, in Maine, last autumn. The following is a portraiture of The Doubting Farmer. It will touch a good many "under the flank," who, we fear, will rather wince and kick, than "come up to the collar" and mend their ways.

Now let us take a look at his barn. It is not quite so good for a barn, as the house is for a house, —and yet it should be better. The barn, at any rate, should be the best of its kind, the most convenient and the most comfortable. But the barn of our practical friend will answer, he thinks, just as well for his cattle, as it did for the cattle of his father, and so, with a nail and a patch, he makes it do. To be sure, it is rather shaky and roughly put together. The shingles have been on twenty-five years, but he guesses they'll stand the sun and snow of another year. The boards, neither clapboarded nor battened, and yielding to the fickle influences of our varying rain and shine, have, for years uncounted, swollen and shrunk, in unequal degree, till at length the emaciating process has made them to shun all actual contact, as if afraid of each other, and yawning seams gape wide, from eaves to underpinning, and as the knot holes, not "like angels' visits, few and far between," have not retained their sweltered and dried-up knots, there is a "pretty smart chance" that the cattle will be well ventilated summer and winter. To be sure, a book-reading farmer once told him, that the warmer his cattle were kept, the less food they will consume, but he don't see why it should be so, and he don't believe it. And so the old barn, shivering with agues, groans and creaks and whistles in the cold blasts of winter. And so shakes the old shed that joins the old barn to the old house, and serves as a shelter for the old cart and old plow and old harrow, above which, on the old beams, roosts the cold-benumbed hens and the old shivering cock, with their frozen combs, keeping all beneath them in a state of unseemly nastiness. * * * *

In the matter of drainage, he knows nothing, and, of course, does nothing. Nor does he keep his grounds well cleared of stumps and stones, and his stone-wall free from brush and weeds. The stumps he thinks will, by and by, rot out, and the stones will be needed to mend the walls which his father put up, and when mending-time comes, he will get hold of them. It would be a waste of time and labor to move them twice,—once to clear the field and once to mend the wall. To be sure, the plow don't go quite so easy nor so deep down where they lie, and sometimes a stoutish rock, or a young boulder among them, gives the plow a hard knock and yanks the cattle's necks with a sudden strain, but they don't mind it much, and in fact are used to it, like eels to skinning, and so, on the whole, he will let the stones stay awhile longer. He plows, he plants, he reaps, he mows, he gathers in his crops, as did his fathers before him, excepting that *they are not quite so heavy as they used to be*, when he was a boy, and this he thinks is owing to causes beyond his control, such as more rain, or more sun, or more cold, or more heat, or more something, or more nothing, than there used to be in his good old father's time. He puts on manure, fully as much, and of the same kind, and in the same manner, as was done by a long line of "illustrious predecessors," but somehow or other, *not with the same successful results*. Something must be the matter, but he cannot tell what. His neighbor talks about finding out what the soil may have lost, during the long time it has been under cultivation, and of restoring the lost elements, and so bringing back the soil to its original strength, but this is all Greek to him, and he don't understand nor believe in Greek. He has never attempted root-crops, though strongly advised so to do, for he thinks the experiment would be of doubtful success, and would require more labor than he is willing to expend, and more hands than he thinks he can afford.

We wish we could extract more liberally from this excellent address, as it is full of capital hits at the loose ideas that prevail about farming. The writer so mingles wit with wisdom as to make his subject exceedingly *attractive* while he instructs.

For the New England Farmer.

THE FILBERT.

That the filbert can be successfully cultivated in this latitude, there appears to be no doubt, as two species, the *corylus rostrata* and *americana* are found growing wild in abundance. They are known by the name of hazle nut, in this region. There is also a species native in Europe, which is there called hazle nut, and it is said the filbert is but an improved variety of it. Our native kinds are both shrubs, but some of the cultivated kinds attain a height of thirty feet. William Cobbett sent a few trees to Dublin, Pennsylvania, not more than fifty years ago, which were planted, and seventeen years after he states that he saw them when they had attained the height of twenty feet, and produced five or six bushels in a year, measured in the husk; a yield seldom witnessed in England. He earnestly recommends the cultivation of them, and thinks the climate extremely favorable. In Europe, an acre of land will sometimes produce two hundred dollars worth of nuts in a year. In Italy, and Spain, they are cultivated to much extent, and the returns are very profitable. They may be propagated by layers or grafting.

It is desirable that the experiment of cultivating the filbert, should be tried here, as there are vast quantities consumed in the United States; and as we have almost every variety of soil and climate, the effort must be successful. It would seem that New England is as well adapted to the purpose as any other section, from the circumstance of two species, both perfectly hardy, being found indigenous in many parts of it. O. V. HILLS.

Leominster, Mass., 1856.

For the New England Farmer.

PORTRAITS FROM THE FIELD AND FARM-YARD.

BY WILSON FLAGG.

THE OWL.

In my portraits from the field and farm-yard I must not omit the Owl, which is one of the most remarkable of the feathered race, and in one way or another familiar to all persons. There are about fifty species belonging to this tribe; but I shall select for my sketch the common little brown owl, (strix nævia) which is one of the typical owls, and affords a fair specimen of the race. The owl has been, by naturalists, compared with the cat, to which he bears a strong resemblance in his face, in the capacity of his vision, and in his predatory and nocturnal habits. Like the cat, he sees most clearly by twilight, or by the light of the moon, seeks his prey in the night and spends the greater part of the day in dozing. He has a large head, round, full and glaring eyes, set wide apart, and partially encircled by a disk of white feathers, adding a peculiar and significant expression to his face. His hooked bill turned downwards, so as to resemble the nose in a human face, the general flatness of his features, and his upright position, yield him a singularly grave and intelligent look; and it is undoubtedly on account of these appearances, that he was selected by the ancients as the emblem of wisdom, and was consecrated to Minerva.

After his nocturnal foragings, he rests quietly during the day in some secluded retreat, where he is not likely to be interrupted. His fear of disturbance and his wish to escape the intrusion of other birds has accustomed him to make his abode in desolate and ruined buildings, and with these solitary haunts his image is strongly associated. In such places he resides during the day, and there in company with his mate he builds his nest and rears his young. In thinly settled countries he selects the hollows of old trees and the clefts of rocks for his nest and his retreat. All the small species of the owl, however, seem to multiply with the increase of human population, living upon the rats and mice that accumulate in old barns and granaries. The habit of seeing the owl in these desolate haunts which are supposed to be the abode of wicked spirits, has caused many superstitions to be attached to his image. His voice is supposed to bode misfortune, and his spectral visits are regarded as the forewarnings of death.

The owl is remarkable for the acuteness of his hearing, which enables him to distinguish the slightest sounds; and the plumage of his wings is extremely soft, causing him to fly with so little noise as to be scarcely perceptible. Hence, while he is silent in his own motions, he can perceive the least motion or sound from any other object, and is able to overtake his prey by coming upon it silently in the darkness. The stillness of his flight is one of the circumstances that adds mystery to his character, and has undoubtedly contributed to render him an object of superstitious dread.

When the owl is forced from his retreat in the daytime he is singularly defenceless, and is at the mercy of his enemies, who seem to be aware of his helpless condition. On such occasions many of the smaller birds assail him and annoy him in various ways, while his purblindness prevents him from defending himself. This is no more than just retaliation upon an enemy who selects the hour when other birds are sleeping, to attack and devour them. It is probable that while sitting upon the branch of a tree or on a fence, after having been driven from his hiding place, he has formed a subject for painters, who have always delighted to introduce him into their pictures, to add expression to a desolate scene—an old deserted house, a ruined tower or an ancient belfry. Hence the owl deserves in a special manner to be named among those animals which are called picturesque.

I will not enter into a speculation concerning the origin of those agreeable emotions which are so often produced by the sight of objects that are suggestive of ruin or desolation. Nature has beneficially provided that many an object which is capable of communicating no direct pleasure to our senses, shall send joy to the heart through the medium of sentiment. The figure of the owl is closely allied with the sentiment of ruins, and to this feeling of the human soul we may trace the pleasure we derive from the picture of this bird in his appropriate scenery. Two doves upon the ragged branch of a tree in a wild and beautiful sylvan retreat, are not more suggestive of pleasing fancies to the mind, than an owl sitting upon an old gate-post near a deserted house.

I have often listened with peculiar pleasure to the distant sounds of the wings of night birds, on a summer evening in the country, while they are flying over short distances in the woods. There is a mysterious feeling excited by these sounds, that seems to heighten the pleasure derived from the delightful influences of the season. But these emotions are nothing in intensity to the scarcely perceptible sound attending the flight of the owl, as he glides by in the dusk of the evening, or in the dim light of a summer moon. Similar in its influence is the dismal voice of this bird, which is heard most frequently during the latter part of summer and in the autumn, when the young ones are out, and use these cries for purposes of mutual salutation and recognition.

These notes in the species which is the subject of my remarks, are singularly wild and not unmusical. They are far from being disagreeable to my ear, though they have a cadence which is expressive of dreariness and melancholy. These notes might be correctly represented on a C flute by commencing with D in the octave, and running down by semitones to one octave below, and constantly repeating this performance, for the space of about a minute, with occasional pauses and slight variations. The owl does not slur the passage, and the separate notes in the scale may be distinctly perceived, with intervals of about a semitone.

The owl is not usually regarded as a useful bird. Perhaps the generality of the tribe deserve to be considered only as mischievous birds of prey, and no more deserving of mercy and protection than the hawks to which they are allied. Not so should we regard the little red owl, or his congener, the barn owl of Europe, or any of the smaller species. The red owl is very serviceable as a destroyer of vermin; and I have no doubt that were the species to be domesticated, one pair of owls would keep our enclosures almost entirely clear of rats and mice. The owl flies low, because his prey consists of those small quadrupeds which are generally out by twilight. It is probably on account of his low flight that he is so seldom seen when on the

wing. He is said by those who have observed his habits to be remarkably diligent and expert in taking his prey, and to be in the habit of destroying and carrying to his nest a greater amount of provision than is necessary for the supply of his family.

The reader may form a conception of the usefulness of the owl from the following remarks of Mr. Waterton: He says that "if this useful bird caught its food by day, instead of hunting for it by night, mankind would have ocular demonstration of its utility in thinning the country of mice; and it would be protected and encouraged everywhere. It would be with us what the Ibis was with the Egyptians. When it has young, it will bring a mouse to the nest every twelve or fifteen minutes. But in order to have a proper idea of the enormous quantity of mice which this bird destroys, we must examine the pellets which it ejects from its stomach in the place of its retreat. Every pellet contains from four to seven skeletons of mice. In sixteen months from the time that the apartment of an owl on an old gateway was cleaned out, there has been a deposit of above a bushel of pellets. * * * When farmers complain that the barn owl destroys the eggs of their pigeons, they lay the saddle on the wrong horse. They ought to put it on the rat. Formerly I could get very few young pigeons, till the rats were excluded effectually from the dovecote. Since that took place, it has produced a great abundance every year, though the barn owls frequent it and are encouraged all around it. The barn owl merely resorts to it for repose and concealment. If it were really an enemy to the dovecote, we should see the pigeons in commotion as soon as it begins his evening flight; but the pigeons heed it not; whereas, if the sparrow hawk or hobby should make its appearance, the whole community would be up at once; proof sufficient that the barn owl is not looked upon as a bad or even a suspicious character by the inhabitants of the dovecote." The English barn owl alluded to by Mr. Waterton, is likewise indigenous in America, hough not so common as the red owl.

Few persons are aware of the vast amount of mischief which may be committed in our fields by field-mice, which, without some such check as that of the owl, would multiply with incredible rapidity. Mr. Jessie remarks in his "Gleanings" that "an extraordinary instance of the rapid increase of mice, and of the injury they sometimes do, occurred a few years ago in the new plantations made by order of the Crown in Dean Forest, Gloucestershire, and in the New Forest, Hampshire. Soon after the formation of these plantations, a sudden and rapid increase of mice took place in them, which threatened destruction to the whole of the young plants. Vast numbers of these were killed, the mice having eaten through the roots of five year old oaks and chestnuts, generally just below the surface of the ground. Hollies also, which were five or six feet high, were barked round the bottom; and in some instances the mice had crawled up the tree, and were seen feeding on the upper branches. Various plans were devised for their destruction; traps were set, poison laid, and cats turned out; but nothing appeared to lessen their number. It was at last suggested that if holes were dug into which the mice might be enticed or fall, their destruction might be effected." These holes were made in Dean Forest about twenty yards asunder, and from eighteen to twenty inches in depth, hollowed out much wider at bottom than at the top; so that the animal when once in could not easily get out again. In these holes at least thirty thousand mice were found in the course of three or four months, and it was calculated that a much greater number were taken out of the holes by weasels, owls, magpies, &c. The food of the field-mouse is exclusively vegetable, and hence it is highly important to the farmer to prevent its increase.

"HOE OUT YOUR ROW."

One lazy day a farmer's boy
Was hoeing out the corn,
And moodily had listened long
To hear the dinner horn.
The welcome blast was heard at last,
And down he dropped his hoe;
But the good man shouted in his ear,
My boy, "hoe out your row!"

Although a "hard one" was the row,
To use a plowman's phrase,
And the lad, as sailor's have it,
Beginning well to "haze"—
"I can," said he, and manfully
He seized again his hoe;
And the good man smiled to see
The boy hoe out his row.

The lad the text remembered,
And proved the moral well,
That perseverance to the end
At last will nobly tell.
Take courage, man! resolve you can,
And strike a vigorous blow;
In life's great field of varied toil
Always hoe out your row.

HAY CAPS.

Enterprising, systematic farmers, who drive their work, and never have so much on hand at one time as to distract them, derive much benefit from the use of simple, cheap caps to cover their hay at night, or when there is a prospect of stormy weather. But those slip-shod, crotchty fellows, who do everything in a hurry and always by halves, who hate books and manure cellars, and put a stone in one end of the bag when they go to mill, are not expected to find benefit in anything out of the kingdom of Old Fogydom! *They* wouldn't cover a hay cock with a cap—not they, they 're too slow for that. They had rather let it lay and soak awhile in rain water, and get it in at their leisure, some day next week, perhaps. They don't know whether the cap should be kept on through a hot sunny day, or not, and they wouldn't kiss a pretty girl if they had the chance, because her lips were young! But that is not our taste. We go for the caps, for sweet hay, sweet lips, and young America generally, wishing Old Fogydom all the comfort it can find in its arm-chair with so many tantalizing objects about it.

A Simple and Probably Efficacious Antidote.—A correspondent of the London Literary *Gazette*, alluding to the numerous cases of death from accidental poisoning, adds: "I venture to

affirm there is scarce even a cottage in this country that does not contain an invaluable, certain, immediate remedy for such events—nothing more than a dessert spoonful of made mustard, mixed in a tumbler of warm water, and drauk immediately. It acts as an emetic, is always ready, and may be used with safety in any case where one is required."

FARMERS' GARDENS.

As a general thing, farmers do not provide themselves with good gardens; at least, so far as the writer has travelled, he has seldom seen what he would call a good garden on farms. The excuse for this neglect is generally the same with all of them—they "have no time to attend to such small matters." And yet it may safely be asserted that an acre of ground appropriated to a good garden will be more profitable to the farmer than any other ten acres of the farm. The interests of the farmer, the comforts of his family, the good condition and health of his whole household, require such a garden on every farm in the country. And it should be a *garden*—not a mere exucse for one a mere weedy patch. It should be one so managed and arranged that every vegetable of a wholesome quality for human food should be raised in it in perfection, and at the earliest season. After a Winter's diet on solid and generally salt animal food, the human constitution requires the deterging operations of free vegetable and fruit diet, and, as a general rule, no one can dispense with it safely. Besides this, the natural appetite calls for it, and there are few pleasures that may be so safely and even beneficially indulged in. In the latter part of Winter and early in Spring, measures should be taken to secure *early* vegetables of all kinds capable of early cultivation. Details will not be expected here; there are other books and papers appropriate to such information; but I cannot help saying, that when I am at a farm-house, at a season when early peas, beans, cabbage, cucumbers, potatoes, green corn, lettuce, &c., are properly in season, and find none of these luxuries on the table—nothing but the *blue beef*, salt pork and beans or potatoes of Winter—I am free to say I do not envy that farmer's life nor his family their enjoyments. These very people are fond enough of such things when they go to the city, and it is not therefore want of taste. It is simply the fault of negligence. Why may not every farmer in the State have every kind of early vegetables on his table as early as any gardener near the cities can raise them? There is not a single reason why he should not, while there are a great many why he should. The gardeners have to incur a very considerable expense in procuring *hot* manure for their hot-beds, while the farmer has it in his barn-yard. The gardener has every thing to purchase, and draw a considerable distance, while the farmer has nothing to buy. The small quantity of lumber required is probably rotting on his premises. It would only be a source of amusement during Winter for him to construct the frame of a hot bed, and prepare the manure and bed for use. Having done this, and got his plants in a thrifty state, he can, in a short time, when the season arrives, get his garden ground in order and make his plantations. And then he will have these vegetable luxuries as early as many of his town friends can purchase them It only requires a little industry and attention to accomplish this, and, as said before, his enjoyment, his health, and even his interest, as well as the comforts of his family, will be benefited by it.—*Exchange.*

THE USE OF THE EYES.

The proper adjustment of the light is very important to the close reader and student. Alterations of light and darkness distress weak eyes, and debilitate those which are sound. The sudden transition from dark to light rooms, the degree of light in the study room, the manner in which the light falls upon the page, are all important considerations, though apparently trifling in themselves. Too little light debilitates the eye and compels over-action, while too much dazzles and confuses, and causes a morbid sensibility of the organ. The student should not, after sitting in the dark to meditate, suddenly commence his studies. There should be sufficient light to see easily. The light should be equally distributed, and not reflected or concentrated. The practice of wearing green shades is bad, unless there is a deficiency in the prominency of the eye or a peculiar weakness of the sight. Reading or writing by twilight or moonlight, and looking at lightning, are attended with danger to the sight. Sitting in front of a window with a book on the knees, sitting with the back directly to any open window, and permitting strong light to fall immediately upon the paper, holding a candle between the eye and the book, are all practices likely to debilitate the sight. The light should fall obliquely from above, over the left shoulder.—*Scientific American.*

NEW BOOKS.

THE FAMILY KITCHEN GARDENER. *By Robert Buist.* A new edition with twenty-five engravings. This is an excellent work, containing plain and accurate descriptions of the different species and varieties of culinary vegetables. Saxton & Co., N. Y., and 81 Washington St., Boston. Price 50 cents.

FRENCH UNIVERSAL EXPOSITION OF PROCREATIVE ANIMALS, and of Agricultural Implements and Products, for the years 1856 and 1857. A copy of the above has been received from the Secretary of State at Washington. It gives a list of the premiums, classes of stock and implements, and conditions of the Exposition.

TREATISE ON THE STRAWBERRY. *By Samuel S. Brown.* Price 15 cents. It contains about all the information necessary for a successful culture of the plant.

AN ADDRESS delivered before the York County Agricultural Society, October 4, 1856, by Gen. HENRY K. OLIVER, of Lawrence, Mass. Excellent. Twenty-five pages, small type, yet all excellent. The General has the happy faculty of so mingling wisdom with his wit, that while every page attracts, it also instructs. We shall find room in another column for some extracts, and only wish we could give the reader the whole address.

PROFESSOR ZADOCK THOMPSON.

We copy from the *Franklin County Journal*, Vt., the following memoir of Professor Zadock Thompson, of Vermont, a gentleman who did much to develop the advantages and charms of rural life,—a true friend of the farmer, and one who has left a healthful impress upon the region where he lived. We have been obliged to omit some portions of the Memoir as it was sent us, as the character of our journal will not admit very long ones.

PROFESSOR ZADOCK THOMPSON died at Burlington on the 19th day of January, 1856, of ossification of the heart. He was born in Bridgewater, Windsor County, Vermont, in the year 1796, and, at the time of his death, must have been in the sixtieth year of his age. His early life was a continual struggle with poverty, and his education was acquired while successfully combatting the evils of pecuniary embarrassment. At the advanced age of 27 years he was graduated from the University of Vermont, having for his classmate in 1823 and now living, the Hon. Frederick H. Allen, an eminent lawyer in Boston, and Warren Hoxie, of Westford, Vermont. Within a twelvemonth from his graduation he published at Montpelier, his "Gazetteer of Vermont," pp. 312, and, in 1833, he published, at Burlington, his "History of Vermont from its early settlement to the close of the year 1832," pp. 252. In the year 1832 he was editor of and principal contributor to the "*Green Mountain Repository*," a monthly magazine published for about a year in Burlington. After pursuing his study of theology, and occasionally teaching at the "Vermont Episcopal Institute" and elsewhere, he was prepared for orders and was ordained to the diaconate in the Protestant Episcopal Church by the Rt. Rev. Bishop Hopkins, in 1836. He subsequently preached in several parishes in Northern Vermont and New York, and supplied the pulpit at St. Paul's Church, Burlington, during the illness or absence of the Rector; but his feeble health prevented his assuming the active and onerous labors of a parish.

Ever since the publication of the books before mentioned, he had contemplated a larger and more comprehensive work which would embrace the General History of Vermont, both natural and civil. From 1838 to 1842 he devoted the greater part of his time to preparing and publishing his "Natural, Civil and Statistical History of Vermont."

The prosecution of this purpose necessarily brought him into contact or correspondence with the naturalists of the country. In completing his account of the birds of Vermont he was greatly assisted by Dr. Thomas M. Brewer, of Boston; in determining several species of reptiles and fishes, he was aided by Dr. D. H. Storer, also of Boston. For a full description of our molluscous animals, he was indebted to Prof. Charles B. Adams, then of Middlebury College, and to Prof. George W. Benedict, then of the University of Vermont. For his catalogue of plants, he was indebted to the late William Oakes, of Ipswich, Mass., to Prof. Joseph Torrey, William F. Macrae, and John Carey, Esq., and others. With these aids in his arduous labors, Prof. THOMPSON succeeded in embracing in his work every thing of special importance relative to the Natural and Civil History of Vermont; and published it in so condensed and cheap a form as to place it within the reach of every family in the State, having but little regard to a pecuniary recompense from the sale of a book which had cost so much travel, research, time and expense in its preparation.

Prof. THOMPSON found time also to prepare annual astronomical calculations for the Messrs. Waltons of Montpelier, and to publish a valuable arithmetic and elementary work on the Geology and Geography of Vermont, for the use of schools, both prepared in the systematic, lucid and condensed manner which imparted so much value to all of his publications.

In 1845, Governor Slade appointed Prof. Charles B. Adams, State Geologist, who, with the approbation of the Governor, appointed the subject of this memoir one of his assistants in the field labor. Prof. THOMPSON and the Rev. S. R. Hall, the other assistant, visited and explored "more or less thoroughly" about 110 townships in one season; and Prof. THOMPSON was actively engaged in this important scientific labor until the Legislature of Vermont neglected to make an appropriation for a Final Report on the Geology of our State, and thus permitted the materials, manuscripts, books, and specimens belonging to the Survey to remain at Montpelier and Burlington, locked up in about fifty boxes. The brief and expressive Report of Prof. THOMPSON addressed to Gov. Coolidge, in October, 1849, was published in the appendix of the House Journal for that year, and is a sad commentary on the folly of which our State has been guilty in regard to the matter of a Geological Survey. After the suspension of the Geological Survey, Dr. Horace Eaton, Governor of the State in 1847, appointed Prof. THOMPSON to carry out the Resolution of the Legislature in relation to international, literary and scientific exchanges; and in pursuance of his appointment he presented the exchange system in its clearest light, so that it commended itself to the approbation of every benevolent mind. The preparation of the Report of "Proceedings and Instructions," which, by the bye, was beautifully printed in a pamphlet of 80 pages, reflected great credit upon Mr. THOMPSON, and upon the State, and it is greatly to be deplored that the historical interest which was then awakened throughout the State, by the visit of the Founder of the System of Exchanges, and by the labors of such men as Prof. THOMPSON, Hon. Hiland Hall, of Bennington, Henry Stevens, of Barnet, Daniel P. Thompson, of Montpelier, Prof. James D. Butler, then of Norwich, Vt., and others, should so soon and so thoroughly have subsided and become almost extinct.

In June, 1850, Prof. THOMPSON delivered upon invitation an address at Boston, before the Boston Society of Natural History, in which he made the announcement that "what he had accomplished in the business of Natural History, he had done *without any associates engaged in like pursuits, without having any access to collections of specimens, and almost without books.*" In that admirable address, (which by the way was printed by his devoted friend and neighbor, Chauncey Goodrich, Esq., in 1850, in a pamphlet of 32 pages,) he illustrated *the importance and difficulties of a thorough cultivation of Natural History, in country places*, insisting that a habit of observation and comparison of objects of Natural History could be as quickly ac-

quired in the country as in the city, and urging that the study of Natural History should be more generally taught in our common schools and colleges, for the obvious reason that such a study "would refine and improve the moral sensibilities of our people, and sharpen and invigorate their intellectual powers."

In such labors, beset with the difficulties so freely confessed before the "Solid Men of Boston" on the occasion of the delivery of the last mentioned address, he passed his quiet life. At one time he was a teacher of the exact science; at another time prosecuting his researches into Natural History; and then he might be found preaching in his modest and reverential manner the sublime doctrines of the Christian creed which he had adopted, and whether in or out of the pulpit, always seen and known as the industrious, patient, humble and exemplary disciple of Him who was born in the manger and died on the cross. Prof. THOMPSON thus won friends, not "in single spies but in battalions," friends who knowing the anxieties he felt to see the wonders of the great exhibition at London, in 1851, gladly put into his purse that "material aid," of which teaching and preaching and authorship had not gathered a superabundance. Chiefly through the kindness of friends, which he has beautifully acknowledged in one of his books, he was enabled to enjoy a trip to the Old World, "beholding the wonders of the great deep, and seeing and admiring the wonderful things of Nature and Art which lie beyond it." After an absence of three months, spending a few weeks in London and Paris and after travelling about 7500 miles, he came back refreshed in spirit and health to his humble dwelling at Burlington, and after a while yielded to the importunities of his friends, and published a neat volume of 143 pages, entitled a "Journal of a trip to London, Paris, and the Great Exhibition in 1851." Although this "Journal" is composed of notes for each day from May until August, jotted down when travelling or sight-seeing, for the private eye of family and friends, and with no expectation that they would ever be printed; yet they contain much that is new and valuable, and although published as a "thank offering to his friends," yet the reading public have perused it with equal pleasure and profit.

Since the publication of his History of Vermont in 1842, railroads and magnetic telegraphs have been introduced into the State, and other changes have taken place; and early in 1853, Prof. THOMPSON published an appendix to the History, chiefly in the department of the Natural History. This appendix, although, containing only 64 pages, is a most valuable supplement to his large work, and if his life had been spared a few years, as he says in the Preface, he might have re-written the whole history.

We have now arrived in chronological order at his last work upon which the professor was engaged when the summons came for him to join the majority and be gathered to his fathers. It will be remembered that the labors of Prof. Adams and his assistant had ceased in 1847 on behalf of the State. The cold shoulder of "men most noted for wisdom and virtue" was turned towards them, after it was an established fact "*that as much labor was performed, and as much investigation effected, as were ever accomplished with the same expenditure in any other State.*" Prof. Adams' final report was never made, and January 19th, 1853, he died on the island of St. Thomas, W. I., cut down in the prime of life and usefulness, when all that remained of the geological survey of Vermont was shut up in short hand in the field books of the State Geologist, and his assistants, or locked up in the fifty boxes of unticketed and untrimmed specimens at Burlington and Montpelier. Years after the field work was done, and when Prof. Adams was slumbering in his grave, the "men most noted for wisdom and virtue" discovered that they had made a mistake in arresting the progress of the survey. Then it was that Prof. Zadock Thompson was appointed by statute, State Naturalist, with the following duties: "To enter upon a thorough prosecution and completion of the Geological Survey of the State, embracing therein full and scientific examination and description of its rocks, soils, metals and minerals; make careful and complete assays and analyses of the same, and prepare the results of his labors for publication, under the three following titles, to wit:

1. Physical Geography, Scientific Geology and Mineralogy.
2. Economical Geology, embracing Botany and Agriculture.
3. General Zoology of the State."

Session Laws, 1853, *pp.* 45, 46.

He was pursuing the labors of this responsible task which the State had honorably to herself and to him, commissioned him to perform, when death bereaved his family and friends and the community of a man, who in all things was the type and exemplar of his race. On the same day, three years before, his predecessor went to his long home, both leaving the matter of a geological survey in which both delighted, and in which both had spent long nights and laborious days, still unfinished.

At the time of his death, Prof. Thompson was a Professor of Natural History in the University of Vermont, an institution to which he had been greatly attached since his graduation in 1823; and the eminent self-taught naturalist who had devoted his life in a quiet and unpretending way to independent scientific inquiry and the labors of authorship and the ministry, died in his humble dwelling near the University, with his intellectual armor on, ere his "eye had grown dim, or his natural force abated." Dr. Thomas M. Brewer, editor of the Boston *Atlas*, and a naturalist of great research and acquirement, thus alludes in touching language to the death of his valuable friend:

"His loss, both as a citizen and a public man—he has not left his superior in science behind him, in his own State—is one of no ordinary character. We have known him long and well, and in speaking of such a loss, we know not which most to sympathize with, the family from whom has been taken the upright, devoted and kind-hearted head, or that larger family of science, who have lost an honored and most valuable member. Modest and unassuming, diligent and indefatigable in his scientific pursuits, attentive to all, whether about him or at a distance, and whether friends or strangers, no man will be more missed, not merely in his immediate circle of family and friends, but in that larger sphere of the lovers of natural science, than Zadock Thompson.

At any time we should hear of the death of such a man with deep regret and grief, and these feel-

ings are increased in the present case, when we remember that he has been called from the field of his usefulness when the great work of his most useful life has been but partly done. But he has been taken, and we may not murmur at the inscrutable decree by which that work has been arrested, just as it was on the eve of completion. New England may have more brilliant and more popular illustrators of her natural science, but one more thorough, or more devoted, we have never known; nor one who once known, has been more honored and esteemed by naturalists, or beloved by friends, than the late Professor Zadock Thompson."

* * * * * * * *

After these elegant and deserved tributes, [a portion omitted.—ED.] little remains for our partial pen to add. We have known him well since 1834, in his various relations, as a teacher, as a clergyman, as a professor, as a correspondent and a friend. During the quarter of a century that he devoted himself to the instruction of youth, to the labors of authorship and to scientific research, he exhibited himself as an unselfish, and unambitious man. He loved his pupils, his friends, his church, his associates, his State, his town, and above all, *his home*. As a teacher, he was kind and thorough; as a clergyman, what has been appropriately called his "deep and unconquerable modesty of spirit" prevented his ever rising above the Diaconate in the Protestant Episcopal church.

As an author, he has won high distinction for the profundity of his research, and wonderful accuracy of date and detail has characterized all of his historical productions. His astronomical and meteorological observations were carefully made and noted, and he was one of the best and most reliable correspondents of the Smithsonian Institution.

As his life has been chiefly spent in the development and illustration of the natural productions of his native State, the scientific world, and especially Vermonters, will cherish his memory as that of a man who devoted his life with energy and singleness of purpose to objects of lasting interest and usefulness to the whole community.

Let the memory of such men be kept in perpetual bloom! SUUM CUIQUE.

St. Albans, Vt.

A WIFE'S INFLUENCE.

A woman, in many instances, has her husband's fortune in her power, because she may or may not conform to his circumstances. This is her first duty, and it ought to be her pride. No passion for luxury or display ought to tempt her for a moment to deviate in the least degree from this line of conduct. She will find her respectability in it. Any other course is wretchedness itself, and inevitably leads to ruin.

Nothing can be more miserable than to keep up appearances. If it could succeed, it would cost more than it is worth; as it never can, its failure involves the deepest mortification. Some of the sublimest exhibitions of human virtue have been made by women who have been precipitated suddenly from wealth and splendor to absolute want.

Then a man's fortunes are in the hands of his wife, inasmuch as his own power of exertion depends on her. His moral strength is inconceivably increased by her sympathy, her counsel, her aid. She can aid him immensely, by relieving him of everything which she is capable of taking upon herself. His own employments are usually such as to require his whole time and his whole mind.

A good wife will never suffer her husband's attention to be distracted by details to which her own time and talents are adequate. If she be prompted by true affection and good sense, she will perceive that when his spirits are borne down and overwhelmed, she, of all human beings, can minister to its needs. For the sick soul her nursing is quite as sovereign as it is for corporeal ills. If it be weary, in her assiduity it finds repose and refreshment. If it be harassed and worn to a morbid irritability, her gentle tones steal over it with a soothing more potent than the most exquisite music. If every enterprise be dead, her patience and fortitude have the power to rekindle them in the heart, and he again goes forth to renew the encounter with the toils and troubles of life.—*Life Illustrated.*

MASSACHUSETTS TRANSACTIONS.

ECONOMY.

We have already acknowledged the reception of the Third Annual Report of the Secretary of the Massachusetts Board of Agriculture, and have noticed very briefly some of the contents of this Hand-book of Agriculture in our Commonwealth. And now as we lay down the volume after another partial examination of its contents, and with a fresh admiration for the excellency of its arrangement, we feel impelled to write a lecture on Economy! We hardly know how the perusal of this volume has suggested this topic. It may have been an indistinct view of the labor and expense which the book itself must have cost, freighted as it is with so much information upon the details and results of the labor expended upon the soil in all parts of the State, from the cranberry meadows of the Capecodders, to the sweet-scented buttries among the hills of Berkshire. It may have been a *twinge* of the purse, as we read with so much interest the dissertation of the Secretary upon farm implements, and examined with so much curiosity the many cuts with which his subject is illustrated; or, the remark of the Norfolk County Committee on the same subject, that, "There seems to be a principle at work which requires that, in proportion as the fruits of the earth are aided in their production by beautiful and superior implements, the more costly they shall become." * * * * "What is the peculiar blessings of improvements so greatly extolled, if the result of their introduction is chiefly seen in the enhancement of the price of the necessaries of life, to such an extreme as to drive people from the homes of their childhood to a country where the boasted civilization of our sections have but just commenced to dawn?" Perhaps our mind was directed to the subject of economy by the several reports on Domestic Manufactures; for the chairman of the Hampshire, Franklin and Hampden Committee says, the times have so

changed within the memory of some now living, that of many households, to whom a few years since the description of Solomon would apply,—"Who seeketh wool and flax, and worketh diligently with their hands," it may now with truth be said —"they toil not, neither do they spin." The valuable selection of agricultural Addresses, which occupy the 130 last pages of the volume, as they discuss "Chemistry and Farming," "The condition of Agriculture," "Farming in New England," "The Farmer's Wants," "The Farmer's Errors," "The Future of Agriculture," "Practical Suggestions on Farming," "Relations of the East and West," "The Farmer," "Chemistry of Agriculture," and "Agricultural Societies," may have set us thinking of Economy.

What great thoughts these addresses suggest! What noble fields they open to our view! How much there is yet to learn, how much yet to do! Would that we could whisper in the ear of every young farmer in New England, be economical; save your money, save your strength, save your time! Save them for your farm—save them for your mind—save them for New England. Let others wear fine coats; let others enjoy the

"Midnight dances and the public show,"

let others build large and costly houses for the admiration of passers-by, and fill them with expensive furniture because their neighbors do; let others find themselves obliged to go West, to hide themselves from the results of their extravagant notions. They will be sorry for it. We fully believe that it is want of economy—a vague hope of getting into some place where their own circumstances and the example of their neighbors shall compel them to be less extravagant—that is driving thousands from New England, and from comforts and conveniences which they find they must have here, but which they, strangely enough, think they can do without, just as well as not, when they but once get to the West! It is extravagance, and not as the Norfolk committee say, the "superb instruments which have now become objects of attraction, and almost veneration, in the crystal palaces of the world," that is driving our people from the "homes of their childhood." We might enumerate many of the evils of extravagance, but we think it enough to charge that vice with impairing our enjoyment of such publications as this Third Report on the Agriculture of Massachusetts, by reminding us that many have not the means of profiting by its suggestions.

The great want of New England farmers, is capital—is the money to cultivate as well as they know how, and as well as they can learn how, to do it. And probably in no part of the world have an equal number of farmers so much capital invested in fine clothing, costly houses, expensive furniture, nice carriages, and other luxuries, that add nothing to their resources, as farmers, but draw largely upon them for repairs.

Perhaps the drift of this article may be best illustrated and closed by an example, which occurs to our mind. Among our acquaintances, are two farmers of nearly equal wealth. Some five years ago the wife of one of them fixed her heart upon a sofa. Most of her friends had one, and her snug little parlor, she said, looked vacant. By saving a little here and there, eighteen dollars were laid aside, and the coveted article was wheeled into place. The other family, in like manner, set their hearts on some nice fruit trees. Fifty trees cost no more money than the sofa; yet they cost too much to be thrown away, and extra pains were taken to make them grow. They are beginning to bear. Two or three kinds of apples, as many of pears, and a dish full of quinces, were gathered from these thrifty trees last fall, and we have seen the blossoms upon them again, this spring.

Twenty dollars would buy the sofa to-day; two hundred might buy the trees, and twice that sum might be refused. But remember! we wish to see a good sofa in every farm house, but not at the expense of those things from which must spring the farmer's chief support.

For the New England Farmer.

UNMERCIFUL BEATING OF ANIMALS.

There is no scene in the ordinary walks of life more revolting, or which more keenly stirs up our indignation, than that of a creature calling himself a rational man, in a fury of passion, unmercifully beating, for some real or imagined fault, a dumb animal, as he says, "to break him of it;" but probably, in reality, mostly to gratify his infuriated anger. One can hardly look upon a sight more fiendish, or be engaged in an act really more disgraceful to himself. It is a singular fact that some men never have an animal which is not, every time he is exercised, guilty of some misdemeanor, in their opinion, and which calls for harsh treatment. This rash way of dealing with the brutes may gratify a savage or peevish disposition, but it is anything but economical as a remedial agent; as in nine cases out of ten it aggravates the fault charged upon the animal, and originates others, for which, of course, he must in due time be corrected. He will be apt to partake largely of the fractious nature of his keeper, or become shy and apprehensive, whenever he approaches him, and avoid him if he can. His obedience and general service will be that which *fear* renders in a reluctant manner; and not that which he renders with cheerfulness. It represents, too, the man engaged in it as possessed of anything but a noble and manly frame of mind. He certainly cannot, in the heat of passion, be in a state of mind to do justice to the animal, and will be in great danger of injuring him, as his better judgment will have but little to do with the matter, or with him, at such a time. In fact, we should not be able to discover at such a moment that he was possessed of any such gift; and from the development he makes of himself, while thus

engaged, we should be entirely at loss to know what place in creation to assign him; or what station, in the great chain of animated creation he is designed to occupy. J. S. E.

July 5th, 1856.

REMARKS.—There is scarcely a week but we witness in Boston examples of "man's inhumanity" to his best servant, the noble horse. The first is in the constant and tantalizing use of the abominable check-rein, which causes more anguish to the horse ten times over than all the beating he gets, and the second in overloading and then scourging him because it is out of his power to back or draw the load. We wish there were a city ordinance preventing any teamster from carrying a whip which should weigh more than two ounces.

For the New England Farmer.

RURAL ECONOMY OF THE BRITISH ISLES---No. 16.

IRELAND.

The history of Irish agriculture is as mournful, as the histories of the agricultures of England and Scotland are brilliant. But there are important lessons in it, or I would not attempt this sketch.

In soil, Ireland is superior to England. The conformation of the country is peculiar; mountains range along nearly the whole extent of the coasts of the island,—the interior being a vast plain, and, for the most part, highly fertile. Ireland contains about twenty million acres, exclusive of lakes. The climate is milder and damper than in England, vegetation is luxuriant, and not without reason is the shamrock or clover adopted as the emblem of Ireland. Its southern coast enjoys a perpetual spring, owing to the ocean current of the gulf stream passing along from the tropics, and myrtles grow there in the open air.

No country has greater facilities for water carriage, interior as well as exterior. Immense lakes afford unexampled means of transport; the Shannon, the finest river in Great Britain—half river and half lake—extends nearly across the island; other rivers equally navigable flow in all directions from different lakes, and the coast is everywhere indented with bays and harbors, the most capacious.—Four large cities or capitals, Dublin, Cork, Belfast and Limerick, are situated, as it were, in the centre of the four faces of the island. The whole island, except Connaught and part of Ulster, has great agricultural capacity, and the soil of some parts of it is the richest soil in the world with a calcareous subsoil.

This is the description of a splendid country. Yet who has the heart to repeat its history of misery, poverty, woe, famine and emigration.

The absence of capital and skill were apparent a few years ago, everywhere in Ireland, and the imagination fails to appreciate the loss and destitution of a country, which is so deficient in agricultural capital. Let us try to help the imagination by facts. What was not wanting in Ireland? It was without buildings, fences, roads, drainage, manures; deficient in cattle, cows, sheep and pigs, in plows, carts and horses,—the spade being almost the only implement of husbandry; deficient in turnips, beans, artificial grasses, wheat, barley, stored harvests, milk and cheese—oats and potatoes being the principal food. To have furnished Ireland with the capital which she lacked in sheep alone, as compared to England, would have required a hundred millions of dollars. Two hundred millions of dollars would have been necessary for other kinds of cattle, six hundred millions for drainage, and a like sum for the construction of more comfortable dwellings, roads and fences, and for necessary implements of husbandry—in all say fifteen hundred millions of dollars, which would have been only about $80 the acre. Certainly a much larger sum has been absorbed by England.

This statement shows not only the destitution of Ireland, and one cause of its misery, and the hopelessness of making good, except after long time and effort, the resources which should have been accumulated through and by past generations; but it shows that the capital which is connected with and necessary to a prosperous agriculture is immense, and that a State which has it not must labor long and suffer much, before it can lift itself into a condition of prosperity. But Ireland was not only destitute of agricultural capital, but it was almost without commerce and manufactures. But if it had had commerce and manufactures, and was destitute of agricultural wealth, it would have had no well-founded prosperity. A State is but half a State, if it have a commerce rich in the wealth of the Indies and all seas, if it manufacture the marvels of all handicrafts, tapestries and porcelain and rich furniture, cottons, woollens and shoes; if it possess machinery as ingenious as the human mind and apt as the human hand, and artizans and craftsmen who understand all the arts of luxury and refinement, as well as the arts of common life; yet, if it have not an agriculture turned to the elementary purpose of procuring food and clothing, rich in crops and sheep and cattle, in bread and meat, and a rural population of large aggregate wealth, spread over the face of the country, such a State is weak and unsound; a seam and fracture will be found running through its structure, from its battlement down deep into its foundations. Let Massachusetts, while it rejoices in the development of its commerce and manufactures, beware how it neglects its agriculture.

But these thoughts need not be pressed in regard to Ireland. Her condition suggested only the idea of destitution of everything, except a superabundant population, a few gentlemen's parks, and a few cities. The rest was neglected pasture land and cabins, and a few acres around cultivated with the spade and devoted to potatoes.

Large property ruled supreme in Ireland. The island was divided into immense estates of from one thousand to one hundred thousand acres, and the greater their extent, the more wretched their condition. The advocates of large properties, who attributed to large property all the agricultural prosperity of England and Scotland, were perplexed when they turned to Ireland. On the other hand, though properties were large, farming was small, and the advocates of small farming were equally perplexed by Ireland; for here were hundreds of thousands of farms below five acres, and nearly as many more of from five to fifteen acres, and only fifty thousand above thirty acres. Yet, on every hand were wretchedness and poverty. All, propri-

etors and farmers, seemed bent on a common ruin by ruining the common wealth, the soil. Everything was taken from it, and nothing added to it. Capital was wanting and the skill to employ it.

One thing marks the agriculture of England as superior to that of every other country. It is that the productions of domestic animals, in England, annually is greater in value than the annual crops of England; or, in other words, that the animal produce is greater in value than the vegetable produce. This is always a sign of an ameliatory agriculture. The reason is plain; animal manures are the great means of increasing the fertility of the soil—the more animals the richer the agriculture, the richer the agriculture the more domestic animals—cause and effect, or rather each cause and each effect. No fact, if it be one, makes more against the agriculture of Massachusetts, than that I commented on in a former number—that the sheep and pigs in Massachusetts diminished 177,000 from 1840 to 1850. But in Ireland, the value of the crops was double the value of the animal produce—sure harbinger of a decaying agriculture. Besides, the whole value of the agricultural produce of the island, animal and vegetable, gave to each person but $20 the year, and much of this was exported to absent proprietors, in kind; while that of England afforded each person $40 a year, consumed at home.

Ireland formed one immense pasture country for which by nature it is best fitted with arable lands in small holdings, cultivated chiefly by the spade and devoted to potatoes and oats; yet in 1846 it contained eight millions of people. In such a country, with such an agriculture, how could such a population have been brought into existence, or how existed without the potato—a vegetable which furnishes, especially in Ireland, the largest quantity of human food upon a given surface, yet exhausts without renewing the means of production. The true place of the potato in a well-ordered economy, is as a plentiful provision for cattle, and as a supplement to the food of man—a resource, also, if other crops fail. But it formed in Ireland of necessity three-fourths of the food of the peasantry, and oats the other fourth. As long as these two productions could be obtained the population managed to exist, and unfortunately to multiply, but in wretched poverty.

How came Ireland in this wretched condition? It is said the Irish character has peculiar failings. I am willing to admit that the Celtic race has not the same degree of energy as the Anglo-Saxon, but this cannot account for everything. It is said the Catholic faith has an enervating influence on the Irish. This assertion may be, in some respects, well founded; for it is true, that in general, the Protestant nations of modern Europe exhibit a steadier and more decided character than the Catholic. But it has not always been so, and even now the remark is not absolutely just. Spain and Italy preceded Holland, England and Germany in civilization. Catholic Belgium, and to a certain extent, France, are not now much inferior to most Protestant countries.

But the Irish in America reply to all these imputations. As soon as they put their feet in our soil, these demoralized, degraded and improvident beings become changed, and are among the most industrious in our land. As soon as they have the hope of bettering their condition, they better it. They own two-thirds of the immense deposits of our savings banks, and have sent as much more to help their friends in Ireland. All the prejudices in the world cannot set aside these facts.

How then came Ireland into its wretched condition? The answer dates back in history. Ireland was too near to England, it was conquered, confiscated, seized upon, oppressed by the unbending, exclusive, rough-mannered English. Conquest and confiscations of former days, followed by oppression since, changed the destiny and fortunes of this fair island. Our fathers and the Irish both suffered under English oppression, and fled from it; and in both cases, religion mingled with and increased the bitterness of strife; but the Irish suffered more, far more, than our fathers.

England conquered Ireland and made Englishmen owners of its soil, by confiscations of the estates of the native Irish—masters of its government by excluding Irish Catholics from all participation in it, and made the Irish helots and laborers on the soil which their fathers owned. Stripped of their possessions, disfranchised on account of their religion, the Irish hated the new proprietors of the soil, and the proprietors resided in other lands, for fear of personal violence. Intestine strife and warfare ensued, and descended from generation to generation. A wrong done in the world never dies, but usually multiplies itself in miseries by the force of human passions, to the doers and the sufferers, and to their descendants. So it was with the conquest and confiscations in Ireland. There was peasant warfare, murders, plunderings, and burnings on the one side—government, bayonets and law on the other. There was the cry of "Ireland for the Irish," answered by the cry of "down with the Catholics;" the meteor-like eloquence of Emmett, Grattan and O'Connell shone over Ireland's wrongs, but government replied only by capital trials and bayonets.

But the Irish sunk deeper in poverty, and yet amidst their misery multiplied in numbers; and proprietors rejoiced that wages would be lower and rents higher.

At last, England recoiled from her work, granted Catholic emancipation, and sought in earnest to undo the wrongs of centuries. But it was too late. Man could not repair such evils. The question remained to be solved by God, and has proved a terrible solution. All that long arrear of crime and error was to be atoned for by a terrible catastrophe. In 1846 the potato disease made its appearance, destroying three-fourths of the crop, while the oat crop was equally short. The English government, alarmed at the prospect, took the most active measures for bringing supplies from all quarters; it took half a million laborers into its pay, and spent, in relief of all kinds, fifty millions of dollars. Individuals also made great sacrifices. But these tardy measures of kindness did not arrest the evil. Famine was universal, and lasted several years, and it was found by the census of 1851, that one million of a population of eight had died of starvation and misery.

This frightful calamity effected what years of war and oppression had failed to do—it subdued Ireland. When the Irish beheld the loss of their chief article of food, they saw there was no longer room for them on their native soil. They had rejected the idea of emigration as a flight before the enemy; but they now suddenly passed to the oth-

er extreme. A current or rather torrent of emigration set in, and in seven years a million and a half of persons embarked for America, and the current still flows. Ties of religion and country could no longer bind them to a land of misery and death. The state of warfare ceased. England found in the event her safety and her punishment. God, it may almost be said, had made peace out of solitude.

What was before impossible in rural economy, now became possible; the great division of farms is no longer matter of necessity. In place of 700,000 farms, there may now be half the number. Potatoes and oats which had been grown to excess, may give place to other crops; the four-course system may be extended; cattle, which were neglected because the population could not get enough poor food to feed themselves, may be multiplied. Wages will be higher and capital will slowly accumulate in the farmers' and laborers' hands. If manufactures and commerce develop themselves, capital may yet enrich the Emerald Isle. But farming capital is yet very deficient there.

Ireland owes to Sir Robert Peel one great measure of relief for which it will long bless his memory,—the Encumbered Estate act. The object of this act was to facilitate the sale of estates hopelessly encumbered with mortgages and other incumbrances. Nearly all the southern and western counties of Ireland were hopelessly insolvent.—Around all property hung a frightful host of mortgages and mortgagees and annuitants,—the claims of some of them dating back to the time of Cromwell. Nobody owned the lands and everybody owned them; no one had the power to improve them. This legal plague, born of poverty, struck the land with barrenness. Sir Robert Peel caused parliament to enact that three commissioners should be appointed for the sale of encumbered estates; that the process before them should be rapid; that the purchaser receiving a title under their conveyance, should have an indefeasible one; that the purchase money should be distributed by the commissioners to those entitled to it. No single measure has done so much to regenerate Ireland. Within three years after the commissioners entered on their duties, they had petitions before them for the sale of 2500 properties, charged with mortgages to the extent of a hundred and fifty millions of dollars. At the sales, a majority of the purchases are made by the Irish, a pleasing fact.

This sketch of the agriculture of Ireland may remind the reader of a work by an Irish author, on the "Reptiles of Ireland," who devoted a chapter of his volume to snakes, and had nothing to say about these reptiles, except that there are no snakes in Ireland. But if there be no good farming in Ireland, there are warnings enough of the dangers and evils of bad. That unhappy country shows that when crushing debt exists upon the land, there is misery for the farmer, and exhaustion of the soil; that when agricultural capital is wanting there can be no agricultural prosperity, and that neither by large farms nor small farms, can the result be avoided; that the accumulation of this capital is the result of much labor, through many generations; that there can be no good agriculture, unless there be on the land great numbers of domestic animals, and if the agriculture be truly prosperous, the annual animal produce will be greater in value than the annual crops; that a country cannot escape the danger of famine, if it rely for its food on only one or two crops; and it shows that dreadful lesson of Divine Providence, that a wrong done never dies, but that "the iniquity of the fathers is visited upon the children unto the third and fourth generation." M.

"HOW COUNTRIFIED."

I saw a manly farmer, a champion of the soil,
With his neat, though homely garments, and look of honest toil;
With wealth of heart, and wealth of hand, brown beauty in his face,
He stood within your city, and I marked his modest grace;
And many passed with stately step, in broadcloth and in pride,
But murmured, as they looked on him, "O, my! how countrified."

I saw an aged lady, a Deborah past her prime,
Who'd measured years of usefulness, content to bide her time;
For a seat within a stage-coach, I heard her ask one day,
When one with face like Esau, (no birthright by the way,)
From underneath a cloud of smoke, said, "Can't she ride outside?
I'm sure there is no room within for one so countrified."

In learning's classic temple, with an open brow and high,
Stood one of nature's gentlemen, bright genius in his eye,
Yet bore his hands a trace of toil, his frame a store of health,
Of far more sterling worth, my friends, than all his classmate's wealth;
And high up wisdom's mount he stood, it could not be denied,
Yet in the distance one could see how very "countrified."

I saw a bounteous, well-spread board, in farm-house kept with care;
And merry was that household band, for city friends were there,
While the generous, soul-felt welcome, each kindly lip expressed,
Inspired with easy confidence, each cared-for, happy guest;
And while I listened earnestly to what each might confide,
I heard their numerous praises, but never "countrified."

Not many months from this, I saw the mistress of that farm,
At threshold of her last year's guest with satchel on her arm;
Straightway a little daughter, well instructed what to say,
Appeared to tell her country friend, that "ma had gone away."
As with disappointed countenance, the woman turned aside,
The lady murmured in her room, "She looked so countrified."

Shake off your cankering fetters, ye slaves to Fashion's king,
Declare your independence, and truthful offerings bring,
To deck the shrine of liberty; in virtue put your trust,
And honor merit everywhere, in damask or in dust.
We're children of one family, it cannot be denied,
For our father dwelt in Eden—and he was "countrified."

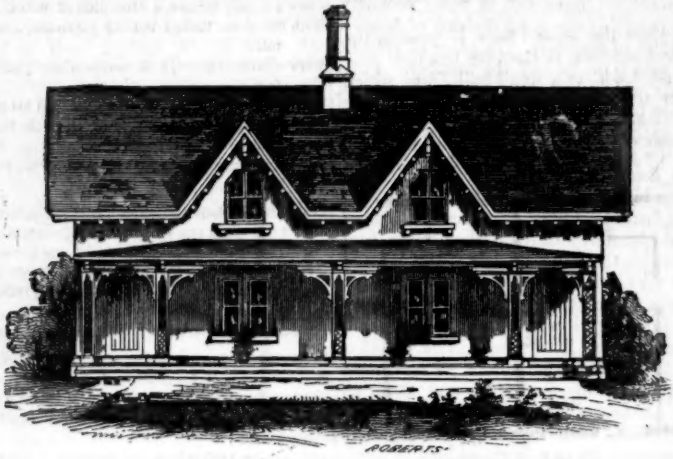
New Bedford Standard.

THE CEDARS.

The question is often asked, what ails the cedars? but none seem to be able, satisfactorily to reply. As early as April they had the appearance that evergreens presented during the severe drought of 1854, the leaves had a reddish-brown look, something as they appear when changing their old foliage for new. Many supposed it to be merely that natural and annual transition. But the season passed when that appearance was natural, and still the cedars have a gloomy and funereal dress, still fading, falling, and leaving bare and disconsolate looking branches.

This condition of the cedars may be noticed

through a wide extent of country; through Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland and Massachusetts. We have not been in Maine, New Hampshire or Vermont to notice them there, and are not informed whether they are affected or not. At this time, many trees seem to be actually dying. What is the cause of it? Is there a widely-spread disease or contagion, as was the case with the buttonwood trees, or is it the effect of winter, frost, heat or moisture?



PLAN FOR A DOUBLE COTTAGE.

Among the various plans of buildings which we have from time to time presented, there has been none, we believe, for a double dwelling. In Gervase Wheeler's *"Homes for the People,"* we find the following illustration and descriptions, and give them, in the hope that our readers will find just what they want.

A small home for the laboring man in the country, or the mechanic in the suburb of a city, is much needed. Frequently the inducements of some saving in cost are sufficient to cause the erection of double cottages, each one entirely distinct, but causing a diminished outlay than would be required for the construction of two separate dwellings.

Small houses so contrived are in increasing demand. The following design illustrates a convenient plan by which two separate dwellings are comprised under one roof.

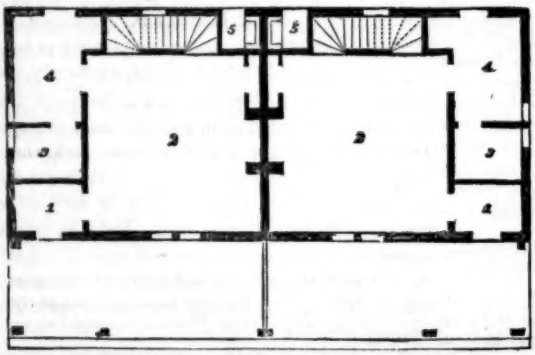
The plan represents a parallelogram consisting of a double square, each half of which is twenty-two feet, forming in all a building forty-four feet by twenty-two, inside dimensions in the clear. The chimney for each half is in the party wall between, and the entrances are at the farthest corner of each front.

Each dwelling is arranged as follows:—

On the outer corner is an entry, No. 1, containing the front door, and fitted with hooks and other conveniences for out-door garments; in this is space for a wash-stand for the use of the men of the family, when returning home for their meals.

No. 2 is a large family living room, sixteen feet square, having a fireplace and a large closet by its side for earthern-ware. From this room an inclosed flight of stairs leads to the cellar and to the rooms upon the floor above.

By the side of the kitchen is a large inner closet, No. 3, lighted by a window at the side, and opening from a sink-room and scullery, No. 4, which contains an outer door, and in the recesss by it a sink. Under the staircase window is a covered shoot to the cellar. Entered from outside the building is a necessary, No. 5, so arranged as to come next that of the other dwelling, and thus constructed over but one vault. The walls surrounding this are of brick, cemented; and although under the same roof as the rest of the house, the position of this appendage is in no way a source of discomfort. From it, just below the seat, a flue is formed in the party wall, discharging into the smoke-flues from the fireplace in the living room, by which means all impure air is drawn off and discharged above the building. If wished, the partition wall, between 3 and 4, could be extended into the latter, and the increased space given to the



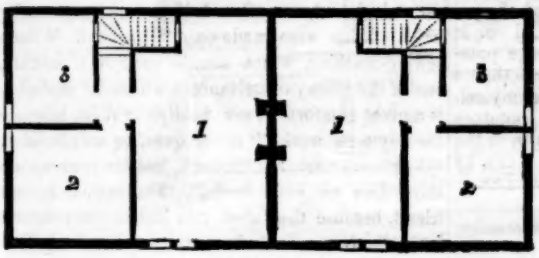
DOUBLE COTTAGE—PLAN OF GROUND FLOOR.

former, would make it sufficient for a sleeping room for a man or boy.

These plans are drawn, as before remarked, to an enlarged scale. The height of this story, in the clear, is eight feet six inches, and the walls are thirteen feet from the underpinning to the underside of the plate, by which the chambers are made airy, and each room of proper height upon the walls.

The space upon the second floor is used in the most economical manner, as the plan testifies.

The staircase leads to a small hall, from which doors conduct to a large chamber, No. 1, in one end of which is a recess for the bed, leaving space in the remainder of the chamber for a second bed, if the number in the family required. No. 2 is the



CHAMBER FLOOR.

second chamber, and No. 3, adjoining it, is of diminished size. Above the doors of each room, are apertures for the circulation of air, and in the skirting-board of each, opening on the well of the staircase, or the upper hall, are left registers for the admission of a current of air above the floor. A large window is provided upon the stairs, which should drop at the top as well as bottom sash, and, when open, would from its position fully ventilate the air in the upper floor of the building; inner windows are also provided in rooms 1 and 2, opening to the well of the stairway.

Space would not permit the provision of closets, which, unless properly aired and attended to, are nests for vermin in such small dwellings. If needed, however, the recess at the end of room No. 1, could be inclosed so as to form a large store closet, and having a swing window inserted therein towards the well of the stairs, could easily be kept sweet. These simple arrangements for securing a circulation of air in the sleeping rooms, would render them healthful and pleasant, and should, on no account, be lost sight of in the erection of the building.

The outside finish of the cottage is so simple as to render remark unnecessary. The walls, being unbroken by any projections, can be constructed of concrete, adobe, or any other material that local circumstances render most economical and desira-

The chimney shafts are of brick, built so that ble.
the flues are set diagonally to the base, by which means increased beauty of effect is gained and the current of air is broken.

The verandah is cheaply formed, and the roofs are finished merely by the extension of the timbers beyond the outer face of the walls.

The cost of this double dwelling would not exceed one thousand dollars, and under favorable circumstances could be erected for less.

For the New England Farmer.

MY GARDEN.

Its Weeds—Its Insects—Its Birds—Its Injury by the last Winter—An experiment of the fall planting of Potato a failure, and why—Office of the Seed Potato.

1. *Weeds.* The worst kinds to exterminate, I have been taught to call chickweed and quack grass. Perhaps others call the latter witch grass. The chickweed spreads over the ground, in small vines, with small leaves, rooting itself as it extends in every direction. It is perennial, having great vitality and fecundity. It blows and seeds early and late, till frost binds the ground, and no cold ever kills it. Any minute part left in the ground propagates itself, and let alone claims the whole of it. Drought is no terror to it. It will live forever when it has fairly taken possession, as in the shade of trees, or in any plot not cultivated. Quack grass sends forth trails of roots near the surface, and sends up a constant thick set of spires to usurp the soil. Tae propagating power of this grass is remarkable, and it is a sore annoyance to the gardener. Summer weeds propagated only by seed are easily subdued, but I would fain learn *how to kill all seeds in vegetable compost.*

2. *Insects.* The curculio is very destructive this season. The black flea begins his work early upon cabbages and cauliflowers, and kills the young plants and stunts them when transplanted. He riddles with his punctures leaves of potatoes till they blossom, perhaps later. The cutworm fells young cabbages, onions and even potato stalks, as well as beets, and depredates through May and June. The yellow bug and his offspring are very mischievous. For want of cucumbers and melons perhaps, he attacks, on my premises, the potato vines, and fares sumptuously till the present time, July 9th. Very voracious and prolific, this insect breeds a multudinous succession of broods of slugs, which consume as they go the leaves, leaving but the coarse fibres often, and thus preventing the healthy development of the plant. Its blows are almost uniformly prevented from expanding in my garden, and of course few seed balls are formed. The stalks grow sickly in consequence, and though new ones start from the bottom, they cannot retrieve the damage of the parent stalk, nor do their office in their late growth of aiding in the formation and growth of the tubers. I wonder not that they have consumption and dropsy, for these and other insects, in my experience, *fatally prevent the development and proper functions of the essential part of the plant that expands in the air.* The stalk-borer does a share of the same mischief, entering and drilling and killing the stalks he attacks. He is a fellow of black and white stripes, of length and size according to his age, ever found in the centre of each stalk that wilts.

3. *Birds.* The robin, oriole, chipping bird and yellow bird are kind in destroying many slugs and other accessible insects, but they soon get cloyed and desist.

4. *The past Winter.* It killed my peach trees many extreme branches of the cherry of last years' growth, and greatly injured plum trees, and the Isabella grape.

5. I planted a row of potatoes in November,

deeper than is usual in the spring. Those left in the ground accidentally at digging, have come up well, been healthy, and not known to rot. But I planted *too late*, and the potatoes were found rotted in the spring. If potatoes accidentally left in the ground survive the winter, grow early and appear more vigorous than the spring planted, I ask why cannot we *plant* potatoes in the fall and have them do as well? Let the potato be reposited in the ground with but short exposure to the air.

6. The office of a seed potato is to furnish the germs whence proceed the stalks or vines, and also two sets of roots, sap roots and tuber-bearing roots. Any farmer, by raising carefully all that has grown from a planted tuber from its position will see this. Only a part of the eyes have grown, sometimes three, sometimes more, the others being inert. In the most productive hills only the skin of the parent tuber remains, its substance being used up. It has gone to feed the whole plant. A large potato thus used up, must furnish more food than a small one. A potato found under a bin in my cellar in the fall, sent out stems with little potatoes like peas upon them, and also fibre roots from the same eye. The tuber was exhausted and dry, by the process. J. Lee.

Salisbury, Conn., June 9, 1856.

For the New England Farmer.

FANCY FARMING.

BY HENRY F. FRENCH.

Hay Caps—Mowing Machines—Root Crops—Wheel Hoes—The Double Plow—Boxes and Bugs.

"*Do you think all these fancy contrivances in farming will pay?*" was the sensible question bluntly propounded to me a day or two since, by rather an old-fashioned farmer, who had occasion to pass my land often, and is a keen observer of men and things, with a careful eye to the main chance.

He was looking at the time at my hay in cock covered with hay caps, with a glance now and then at a wheel-hoe, with which at the time I was weeding a carrot bed. "If they don't pay *me*, they may perhaps pay some of you more cautious people, who take the benefit of my experiments, without bearing the loss of their failure," was my reply. The fact is, I was obliged to be a little more meek than accords with my general disposition, because I was conscious that my neighbor had noticed one or two awful failures, not to say blunders, of mine in the farming line, and it would not answer for me to set up for infallibility before *him*. One can pretend to know everything in his newspaper articles, but one's neighbors usually discount a trifle from his omniscience.

We had a good agricultural talk, and if he did not learn much, I did, and have been meditating a good deal on "these fancy contrivances" since; and now, when the rain is pouring like a flood again, on those same hay-caps, on another lot of hay, let us pursue the subject with the readers of the *Farmer*.

HAY CAPS.

Hay caps *do* pay, and no mistake. Take four yards of yard-wide cotton sheeting,—sew it together so as to make two yards square, hem the rough edges, turn up each corner two or three inches and sew it strongly, tie in a short strong twine to form a loop, and you have a hay cap ready for use.

Four sharp wooden pins, of hard wood, half an inch in diameter, eighteen inches long, to be thrust upward through the loops into the hay at the bottom of the cock, complete the preparation.

This is our way of doing it in this neigborhood, and we are all satisfied with it. The cost of the cloth is eight cents per yard, and the making you can calculate better than I, if you make them by hand. Mine were made on a Wheeler & Wilson sewing-machine, which sews a yard in a minute, one of the "fancy contrivances" which, by the way, is a great comfort to my family. "Well, how do the hay caps work?" is the question on all sides. "Why don't they wet through, just as your cotton shirt does on your back?" The reason is, my friend, because they shed rain just as your cotton umbrella does. Or to be more precise, the principle of cohesive attraction at once unites two drops of water that touch each other into one, and the same principle conducts the water along the wet cloth to its lower edge. If the hay were very fine and very green so that the cloth would touch it at all points, it would doubtless take off much of the water, but coarse or partly dried hay is in contact with the cloth, only at comparatively few points, and so the cloth conducts the water away, like the covering of a tent. Coarse clover will remain safe through a week's rain with such protection, while I have had fine hay which was cocked up green, injured by *heating*, not by water, in three days. On the whole, a farmer of moderate means, who cuts much coarse hay, cannot afford to be without some thirty or forty hay caps. He will save their value in one such season as this, or that of last year.

MOWING MACHINES.

In 1853, near Albany, I witnessed a trial exhibition of two mowing machines, Ketchum's and Emery's, each of which did its work handsomely, and at the rate of about an acre in an hour. Since then I have seen several trials, but not one that was satisfactory. Several tried in this county last year, failed entirely. A good mower with the common scythe, can cut an acre of grass in four hours, and if a span of good horses, a skilful driver and a machine worth a hundred dollars or more, and liable to expensive accidents, can do no more than four times as much, there is no great saving of cost on small farms. We usually mow our grass in the morning, let it stand in cock through one night, open it the next day, say at ten o'clock, and get it in in the afternoon, and on this system, the men can cut as much each morning by ten o'clock, as

they can attend to through the day. Of course, we use a horse-rake (the Independent,) with which one man and horse can do the labor of eight or ten men with hand rakes. Any farmer who cuts ten tons of hay, and does not use a horse-rake, is behind the age, and a fit subject for missionary enterprise. Horse-rakes are among the essentials of respectable farmers, and not to be named among doubtful implements.

Let us hear the reports of this year's experiments with mowing machines, and perhaps a different account may be rendered in future. What we want in New Hampshire is a light one-horse machine, and no doubt we shall see it in general use before many years.

ROOT CROPS—SOWING MACHINES—WHEEL HOES.

I shall leave it to the principal editor to advocate the cultivation of root crops, merely saying at present, that as usual, he is in the right, and that the farmers will see, by-and-by, the benefit of this branch of husbandry, especially of the culture of carrots and turnips.

If the land is well prepared, rich and clean, and the proper tools used, a crop of carrots is one of our cheapest crops. I sow them with a machine, about sixteen inches apart, between the rows, about the first of June. As soon as the weeds appear, I run the WHEEL HOE between the rows. This may be done even before the carrots are up, if necessary, as the mark of the drill is plainly visible, and I never use a common hoe at all about the crop. The wheel hoe, I think, was invented at Danvers, where they raise onions, and it is the very best hand machine of its cost, on the farm. They are sold for about a dollar and a half. I think a crop of carrots or onions may be raised with *one-half* the labor, by the use of this machine, that is required without it. Mr. Jona. A. Robinson, of Fremont, N. H., has taken a patent upon a Hand Cultivator, which I have never used, but which is claimed to be an improvement upon the wheel hoe, because it cuts up the weeds on both sides of the row at once.

I intend, this year, to repeat the experiment which I have often tried successfully, of plowing up some of my worn-out grass land, after haying, and re-seeding with grass seed and turnips. I have raised several fine crops in this way, sowing about one pound of turnip seed to the acre, at any time before the 10th of August, broadcast with the grass seed. The prospect now is, that the present will be a favorable season for such a crop. Try it, farmers, as the last chance to make up for want of putting in seed enough last spring. Ashes and superphosphate of lime, in addition to all the barn manure you can spare, are first rate food for the turnip crop.

And in connection with this subject, it may be well to say a word by way of *reminder*, if one may borrow a word from the ministers, which is not even in Webster, of

THE DOUBLE PLOW.

This is classed by many as a "new contrivance," but it is figured in the English books of a half century ago, though perhaps, not then used except for opening drains, or the like. For turning over sod, to be immediately sowed again with grass seed where the land is tolerably smooth, there is nothing equal to the double plow. Apply all your manure in fine compost to the furrow, and harrow it in. The deeper you plow the better, provided you have manure enough to enrich the stratum of soil brought to the surface. A good deep plowing o. sward land, with the double plow, will do more to *kill witch grass* than any other operation. Where I plowed last year, at Chester, on a piece of hard land swarded with this grass, we found, on cross plowing this year, that a large proportion of the roots had been smothered to death. Naturally the roots of this grass run near the surface, not usually more than four inches deep, and trenching them in, notwithstanding the stories about their vitality, is sure death to them. By common plowing, they are cut in pieces, and thus multiplied, and worked deeper into the soil than they would naturally strike.

If some of the Bay State farmers will plow an *old sward* of witch grass a foot deep, with the double plow, next May, harrow it, roll it with a heavy roller and plant it immediately, I have no doubt they will confirm this my apparent heresy, about this plant, which is at once, one of our bes grasses, and most troublesome weeds.

BOXES VERSUS BUGS.

I cover my cucumber and squash plants with boxes covered with gauze, which I find effectual to keep off the striped bugs. The *Maine Farmer* declares that the gauze is a work of supererogation, and that a fence made of cloth or wood, six inches high, round each hill, is just as good without a covering. I know of no better authority than the *Maine Farmer*, and as soon as I read the article, I took off the gauze from several boxes, with a view to test the matter, but have not yet become satisfied whether our friend is correct or not, or whether his theory, as to how that kind of bugs fly, will answer without a slight variation, for this latitude. So far as I could observe, I was inclined to the opinion, that our bugs *had not read the Maine Farmer!*

Exeter, July 12, 1856.

A SHOEING STOOL FOR BLACKSMITHS.—The following is a description of a stool for blacksmiths for shoeing horses, which I have invented and found to be very convenient and useful, and I present it for the benefit of the craft.

I make a light, portable stool, of the form of a common crutch, with one leg, and put a cushion

on the seat. To this is secured a strap, which passes around above the hips, and is buckled tight in front. The seat of the stool is about four inches thick, and is held to its place in the leg by an iron spur. The blacksmith puts it on behind and between his thighs and buckles it in front, and the horse's foot is placed on the seat; it thus supports the weight of the animal's leg, and relieves the back of the shoer from that severe strain which makes horse-shoeing such hard work.—*Scientific American.*

For the New England Farmer.

SCENERY AND POTATOES IN NOVA SCOTIA.

A few remarks on potato culture may not be without interest from a Vermont farmer, who in his travels "away down East" finds himself in Acadia, the land of the potato. When the English took the country from the French, the name was changed to Nova Scotia, or New Scotland. In the distance may be seen the village where lived "Benedict Bellefontaine, the wealthiest farmer of Grand Pre, and Evangeline, his daughter," also, "Gabriel the faithful, and his father, Basil the blacksmith;" the basin of Minos washing its shores, and Blomidon cape rising aloft in the distance, looking quietly down upon one of the most beautiful scenes imaginable. Its summit affords the finest water and landscape that I ever looked upon. The valley of Cornwallis and Hooton is about two miles wide, on each side of which rides a ridge of land, called here, the North and South mountain, running parallel to each other, extending from Cape Blomidon to Digby—just one hundred miles. The The shores of this valley, at the eastern part of Cornwallis, is washed by Minos Basin; and formerly, the tide, which rises here *sixty feet*, flowed up numerous rivers, running into the country many miles, overflowing large tracts of land at every flood, and depositing a rich alluvial soil. The old French Acadians, between one and two hundred years ago, built abouteauls or dykes across the rivers, excluding the tide, and making the richest grass land in the world; which now, after a century has passed away, without ever having received a particle of manure of any kind, yields a burden of hay, the amount of which, per acre, exceeds anything that a Vermont farmer ever dreamed of. The statement made by persons who are perfectly reliable is this; that many portions of this dyke land yield at one mowing, *four* and sometimes *five* tons per acre of the best hay, and that too, when well made, and after it has been kept in a barn until winter. The same land yields four hundred bushels of potatoes per acre.

The farms on the upland are generally superior. Very seldom will one be found having less than ten acres under cultivation with potatoes; and our farm has now sixty acres planted with the favorite esculent. The method of culture is quite different from what is practised in Vermont. One eye to the hill is all that is used, the hills being two feet apart each way. The number of bushels required to plant an acre is four, and the average yield two hundred bushels per acre. Large potatoes are preferred for seed. Indeed, few small potatoes are raised in Cornwallis. Small potatoes, when raised on poor land and well ripened, yield a large crop when planted on good land; but the small ones raised on rich land are generally what is called the second settings, and probably do not fully ripen, and are not considered good seed. One of the best farmers in the country, John T. Newcomb, has informed me that a few years ago, in a time of scarcity, he planted an acre of land with one and a half bushels of small potatoes, putting one eye to a hill, the piece of potato with the eye often being no larger than a pea; from that acre of land he received over five hundred bushels of very large potatoes.

Wheat is raised here, though not largely. They do not sow it until June, usually about the 10th.—One farmer sowed a piece of land to wheat the 29th of June, and received a good yield. Wheat that is sowed in April and May is taken by the weevil.

The business of the country has received a wonderful impetus from the high price which potatoes have demanded for the last few years. The price of real estate has advanced one hundred per cent. More of what is termed Yankee enterprise has been manifested. The schools are becoming superior to their former estate; and church spires are more frequently seen pointing toward heaven, the desired goal of all humanity.

The pending difficulty between the two countries is now a matter of great interest to the good people of the province. They feel much concern for the poor Yankees, and compassionate their condition, in case a war should take place. You cannot convince them but that Great Britain is almighty to destroy every seaboard town and city on the Atlantic shores in an inconceivably short space of time, and would carry devastation and death inland. This, in their loving kindness, they would regret,—*for it would destroy the market for their potatoes.*

P. PINES.

Cornwallis, Nova Scotia, July 14, 1856.

THE SEASON.

Crops of all kinds, and in all sections of our widely-extended country, so far as we can learn from our own observations, and from our numerous exchanges, are abundant, well-ripened, so far as they have been cut, and generally the weather has been such as to enable the farmer to secure them in good condition. The hay crop is a heavy one; wheat looks finely; rye is good; so are oats. Corn is rather backward, but of fine strength and color, and the recent extremely hot days are bringing it forward rapidly. No complaint is yet made of rot in the potatoes, and the vines are now looking well and promise a plentiful crop. Apple trees gave a fair blossom, but through the activity of the curculio, or some other cause, the young fruit has dropt from the tree in large quantities, so that the prospect now is that the apple crop in the eastern part of the New England States will be a light one. Squash, cucumber and melon vines are generally small and look tired, or, as though they had just got up and had not decided whether they will grow or not. Beans look well.

In some of the western States it has been a little too dry, but no general complaint is made. In-

deed, it will be somewhat difficult for them there to procure help to secure the rich harvests of the season.

Upon the whole, the world is beautiful and prosperous to most of us, and famine, in our extended country and diversified climate, will perhaps never visit our people. All we want to make us the happiest and thriftest people on earth, is moderate desires, virtuous lives, and a firm, steady and consistent representative government—a government yielding to all their just rights, and encroaching upon none.

For the New England Farmer.

DEEP PLOWING.

MR. BROWN:—As much has been said upon the subject of deep plowing, perhaps it may be thought superfluous to add anything farther on that subject. Yet, as plowing lies at the foundation of our agricultural pursuits, permit me to give the readers of your valuable journal the result of my own observation and experience upon a small scale. It has been the prevailing opinion among our agriculturists, who own land on the interval bordering on the Connecticut river, that it would not do to plow so deep as to disturb the subsoil, consequently, most of our land has ever been plowed shallow, not more than five inches. Their opinion has been strengthened by an experiment made some years ago. A gentleman from Boston came to reside here, and purchased a valuable tract of land in the meadow. With a heavy team and large plow, which he ordered to be put in up to the beam, he turned up so much of the subsoil, and putting on no manure, that the effect was as might have been expected, it killed the land, at least for a number of years. Whence I concluded, as other farmers did, that it would "kill the land" to plow deep, but being assured by Mr. Holbrook, in some of his judicious remarks published in the *Farmer*, that it would not "kill the land," I was persuaded to try an experiment, cautiously beginning with one acre, which I ordered to be plowed two inches deeper every time of plowing, until it obtained the depth of ten inches. It had not, until then, been plowed more than four or five inches; but after the first year, I was satisfied it was not "killing the land," and had two acres more plowed in the same way. The result will show whether the land is killed or not. Two years ago, the three acres produced 113 bushels of rye, 37½ to the acre; last year from the same ground I raised 67 bushels of shelled corn to the acre, weighing 57 lbs. to the bushel. Thus far, I am satisfied with the experiment. But I ought to say that I do not attribute the unusually large crop wholly to deeper plowing, as there may be other causes to come in for a share.

The same ground on which the corn was grown last year, was sowed to rye after harvesting the corn last fall, and it promises to be a fair crop, but ot near as heavy as the one two years ago.

The manner in which I cultivate my land is simply this: when it is planted we use about ten loads of long manure to the acre, which is plowed under; after harvest, the same ground is sowed to rye, without any manure. E. C.

Northampton, June, 1856.

THE FARMER.

The farmer is a happy man,
He raises all he needs, sir,
The foremost stands of all the van,
All occupations leads, sir.

His cattle furnish beef enough,
His sheep, a heap of wool, sir,
His children hearty are and tough,
His coffers always full, sir.

His barns are large and all well filled
With hay, and corn, and rye, sir,
His orchards rich, his land well tilled,
Both fruit and food supply, sir.

His cellar in the autumn shows,
Of roots, a bounteous store, sir,
He's well prepared for winter snows,—
What could a man want more, sir?

His horses kept in first rate trim,
For wagon, chaise, or sleigh, sir,
Are ready, now, to carry him,
At any time of day, sir.

His cows are many, and the best
The country can afford, sir,
His butter, cheese and milk attest,
His barns have been well stored, sir.

His pigs are of the Suffolk sort,
You never hear them squeal, sir,
Because they never are kept short,
But filled with corn and meal, sir.

His hens are not of Shanghae sort,
He chooses not by size, sir,
An egg's an egg, and when 'tis bought
As large a coin supplies, sir.

His turkeys and his geese are fine,
Of both he has a store, sir,
In fact, the farmer has a mine
Richer than golden ore, sir.

His very bees are "busy," too,
And fill his hives with comb, sir,
They have as much as they can do,
To bring his honey home, sir.

Who would not choose the farmer's lot?
What though he has to work, sir?
Much happiness by toil is got,
But who would like a *shirk*, sir?

There's land enough for all young men,
Our country is a great one,
Just pull up stakes and hasten then,
Where fortunes rich await one.

Drew's Rural Intelligencer

SCOTT'S STRAWBERRY PATCH.—We had the pleasure, a few days ago, to visit the strawberry grounds of Mr. J. C. SCOTT, of Brighton, and look at, and test the varieties growing in his collection. There were about seven acres under cultivation, and had yielded then, two days in succession, *four hundred* boxes each day. These were principally the *Brighton Pine* and *Scott's Seedling*; the latter a large, sugar-loaf shaped variety, very sweet and high-flavored. We may give at a future time an engraving of one of these varieties.

☞ During the last seven years *fourteen hundred murders*, it is said, have been perpetrated in and about San Fransisco, and the city itself has been burned down *seven times*.

EXTRACTS AND REPLIES.

SALT ON PLUM TREES.

Mr. Editor:—In June 7th, of the *N. E. Farmer*, "Norfolk" recommends sifting fine salt liberally on plum trees. I would inquire of your readers who have tried it, if they have seen any bad effects from salting plum trees. I have a fine tree in my yard, bearing plums for the first time, and was anxious to have the fruit mature, so I sifted salt on the top, which killed the leaves where it remained and dissolved, and the tree now looks like one scorched with fire.

I would say to "J. T. W.," of Marlboro', that I have a plum scion set one year ago last spring, that is 4¾ in. in circumference at the but, 5 ft. 5 in. high, had 8 limbs Saturday, that measured

No. 1	2 ft. 1 in.
No. 2	1 ft. 10 in.
No. 3	1 ft. 9 in.
No. 4	1 ft. 11 in.
No. 5	1 ft. 9 in.
No. 6	2 ft. 4½ in.
No. 7	0 ft. 11 in.
No. 8	1 ft. 4 in.

I cut one foot off the top, and 12 side sprouts, last spring.

Nashua, N. H., July, 1856.

Remarks.—You are not the only one who has destroyed the foliage of plum trees by the too free use of salt. As is necessary, in most other experiments on the farm, the salt should be used sparingly, until its effect can be ascertained.

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A PROFITABLE COW.

Mr. David Heath, of North Troy, Vt., week before last made from the milk of one cow of Durham breed, fifteeen pounds of butter. This we deem extra for a cow that has had nothing but common pasturage. From the first three days' milking, he made seven pounds and ten ounces, this being about eighteen pounds per week. The cow probably would have made that had not a part of the milk been taken for family use.

O. N. Elkins.

North Troy, Vt., June 26th, 1856.

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BLOSSOMS, BUT DOES NOT BEAR!

I have a standard Duchess d'Angouleme pear, which blossoms every spring but matures no fruit. I have seen a remedy somewhere, but cannot now call to mind where I saw it, or what the operation was. Who can inform me? S. T., JR.

Swampscott, 1856.

—

CROPS IN VERMONT.

The weather is extremely warm; grass and grain crops look well; fruit trees did not blossom much, many trees are dead, and I think owing to the great growth they got last season, and the severe winter. We had more meadow moles this spring than ever known here before, who ate grass roots and young trees very much last winter. All stock is high; wool is selling from 40 to 50 cents per pound. I think there are many thousand sheep less than there has been any year for the last 20 years in this country. W. T. Goodrich.

Middlebury, Vt., June, 1856.

A GOOD APPLE.

I send you a few of my *Washington Royal* apples to show you their keeping qualities. They are below an average size, but I think are eatable. They have been kept without any extra care, and have proved themselves a good apple to keep for late as well as early eating. I can furnish scions from bearing trees of this fruit the ensuing spring, to those who may wish to obtain them.

Ephraim Robbins.

Leominster, July, 1856.

Remarks.—The apples came in good condition, and were as crisp, juicy and fine-flavored as any we ever tasted in the month of July. Judging from these, we should think them well worth a place in any orchard.

—

ASHES ON BEET LEAVES.

Your correspondent inquires how to preserve beet leaves from the maggot. My beets have been infested with them this year, and last too; my remedy is to sprinkle wood ashes on the leaves, when the dew is on, and I find it effectual, as in a short time they look as fresh as ever.

Cordaville, 1856. A Subscriber.

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OCTAGON BARNS.

Mr. Editor:—I notice a correspondent of yours, C. C., suggests that there is much room saved by building an octagon, instead of a square barn. Will he or yourself give me an idea of its internal arrangements? Respectfully, M.

Highland, Madison Co., N. Y., June, 1856.

Form of the Earth.—The earth being round like a ball, it follows that at a certain distance, even though our vision can reach much further, its form will prevent us from seeing objects even if its surface were perfectly smooth. It has been calculated that at 600 yards an object one inch high cannot be seen in a straight line; at 900 yards, two inches; at 1400 yards, five inches; at one mile, eight inches; three miles, six feet,—so at that distance a man would be invisible. In leveling, it is usual to allow the tenth of an inch in every two hundred yards, or eight inches in a mile, for convexity.

Scientific American.

BOYS' DEPARTMENT.

A VISIT TO LUTHER'S SCHOOL.

[A correspondent of the *Massachusetts Teacher*, "W. L. G.," gives the following interesting account of a visit to a school in which Martin Luther was once a pupil, in Mansfeld, Germany:]

In the last number of the "Teacher" I gave its readers a translation from the treatise of Madame de Stael, on Germany; I wish in this to describe a visit made to a very remarkable school; remarkable not for its size, not for its liberal endowment, not for the learning of its teachers, but because it was the school which Luther attended. In the public school of Mansfeld he was a pupil from so tender an age, that his father used to bring him in his arms, up to the time when in his fifteenth year

he went to study in the higher school of Magdeburg. Here it was that he received fifteen blows in one day, for Luther was no saint, either as boy or man, and was by no means so fortunate as to escape the rod. A friend in Berlin has told me, however, that in this matter, the translator of Dr. Merle's History of the Reformation has made Luther's master little better than a brute, representing that he gave the child fifteen *floggings* in one day. The reader who has the History at hand, would do well to turn to its pages, and correct the error, for it is hardly creditable to Luther's school-days, that it should stand recorded in a book so well known as Merle's History, that he received fifteen floggings within six hours.

Externally the school-room has the same appearance as when Martin Luther entered its door. Over that stands now a statue in relief of one of the counts of Mansfeld, with these lines written beneath:

Cen Trojanus equus pugnaces ventre cohortes
Edidit, eductos sic schola docta viros.
In plures nobis, Maunorum Eques, ede Lutheros
Et surgent Christo plura trophœa duci.

"As the Trojan horse sent out from its belly warlike bands, so a well-taught school sends forth cultivated men. Give more Luthers to us, knight of Mansfeld, and trophies will yet rise to the victorious Christ."

Within, all is changed: the stone pavement whereon his feet trod, alone remains untouched. The walls are white-washed, the upper rooms turned into a dwelling-house for the present teacher; the old seats on which Luther used to sit have been removed and destroyed. On one the name of the Reformer was cut with a knife; that too is gone. When the last, and perhaps the only Americans who have ever been here before, visited the school five years since, the old seats were still to be seen, but since then the teacher who received them in so friendly a manner has died, and the building has been made more conformable to the wants of the present generation.

Still the spirit of Luther dwells in the place: it is called Luther's school; the Reformer's portrait is to be seen in every room, and the thick walls, the windows with their small panes, the low-studded ceiling, all bring those olden times to mind, and one can easily imagine the sickly little boy, the miner's son, on the benches before him.

This is the first school for young children which I have visited in Germany, and a description of its appearance, of the method of teaching, so far as a half day would admit of seeing it, may not be uninteresting to the readers of the "Teacher." My own investigations have therefore been confined to the Re-al schools and the Gymansiums; and of these I shall speak in future letters.

The Luther School in Mansfeld contains about one hundred scholars. Two classes are taught in the building where the Reformer first received instruction; another, the class for girls, meets under the church, where Luther often preached; and the elementary school, where both sexes are initiated into the mysteries of the German alphabet, is held in a neighboring room. These four classes form one school, and are under the general direction of Mr. Polhmann, the instructor of the highest class. The age of the pupils is the same as in the summer schools with us; and when they have been here grounded in reading, writing, arithmetic, geography, history, and morals, they are sent to the neighboring town of Eisleben, the birth-place of Luther, to enter the Re-al School, and to advance to the higher stages of instruction.

The instruction given is of the most thorough kind. Everything is systematized after the general custom in Germany, and an hour is given to every class. The teachers enter thoroughly into the spirit of their work, and everything that the stranger notices bears that air of earnestness which is so grateful to see. The order of the school was nearly perfect. During the half day which I spent there, I saw no instance of whispering, nor any breach of good manners. This is the more to be wondered at, when we consider the crowded state of the rooms. The desks are not separate, as with us, and each accommodated about ten pupils. So closely are they placed together, that at the end of the session I noticed that it was impossible for the pupils to rise and walk into the aisle; they were obliged to work their way along in a very primitive manner.

At the entrance of a stranger, the pupils rise together, and give in concert, the common salutation, "Ich empfehle mich," I recommend myself; and as he leaves the room, all rise again and say, "Adieu!" This originally French expression has become thoroughly Germanized, and is daily to be heard in all the streets and in the shops. The school closes in this instance as with us, the teacher addressing himself to those sitting on each bench, but there was this difference: as each scholar left the room he said "Adieu." These were the only things which were novel, and which seem peculiar to the German character.

I had the pleasure of witnessing four school exercises, in writing, map-drawing, reading and analysis. The writing was excellent: such neat pages and carefully written copies I have never seen.—One recognizes here that great feature of the national character, that exact knowledge of the relations of parts and of sounds, which gives them their excellence in drawing and music.

The German children have this advantage in writing; they have two separate hands to learn: the Italian, which we use, and the Deutsch or national hand, well adapted to rapid writing, but stiff and utterly ungainly. It is well known to our readers of the *Teacher* that German books are every year more and more printed in the Roman character. All scientific books are so; railway tickets, cards of admission to lectures, the laws printed by order of government are so, and the people are gradually becoming reconciled to the change. But the old hand-writing is still clung to. I do not think that it will ever be entirely superseded. For stenographic purposes it is admirable. I have often seen students at the University, take down a lecture word for word from the Professor's lips; and a system of handwriting that has this advantage, may well dispense with ornament.

The exercise in analysis which I witnessed was excellent. The terms used in German grammar are much more intelligible to children than those of Latin origin which are employed with us. The substantive or noun, which conveys to our children no idea, because they do not know Latin, is to the German children the "Hanpt-wort," the head-word; the conjunction is the Bind-wort, the translation of which is so obvious that I will not write it. What life such a nomenclature gives to this usually unmeaning exercise, can readily be imagined.

Reading, too, was very carefully, and what was better, very well taught. Mr. Gieseman, whose class I had the pleasure of hearing, is the compiler of the text-book in common use, and is himself an excellent reader. The German reading books, as I have noticed, are very different from our own. Instead of being composed mainly of extracts from classic authors, and therefore of a literary character, they are mostly made up of bits of history, natural science, geography, and while they teach the scholar to read things which are within his comprehension, they throw a great deal of light upon his school studies.

I talked with the teachers about the methods of discipline which they employ in the government of the school. They punish with the rod an incorrigible offender, but they use words so long as they are equally effective. The province of the teacher is broader than with us; they have the care of the children both within the school-room and beyond its walls. Farther than this, Mr. Pohlmann told me, that it is his duty, if he sees any boy in the place, whether his scholar or not, engaged in anything which is not correct, to exercise the same vigilance over him as over the children under his instruction. What a field for influence is thus opened to the faithful teacher. In such duties can he realize what a hold he may have upon posterity; onerous as his career may be, he can rely that they will all be recompensed. W. L. G.

LADIES' DEPARTMENT.

HOTEL LIFE IN NEW YORK.

Many noble natures are ruined by the fashionable follies and vices of American society. The old relations and endearments of home are almost unknown in gay circles; there is no inward life, no retirement, in which the graces of the heart are nurtured. All is life outward, gay, dazzling, aiming at display, asking for admiration. The *Transcript* has some pertinent remarks on the influence of hotel life in New York.

"Take, for instance, a woman brought up in one of our New England or western towns, of good parentage, some culture, and decided attractions; you have the germs of a superior character. Choice society, retirement, a life of tranquil improvement, would develop the bud into a consummate flower. Perhaps such a girl marries a business man, who brings her to a New York hotel of the first class. For the first time she is exposed to an epitome of the great world; daily she is seated beside a foreign adventurer or an old coquette. The rude and the gentle, the pleasure-seeker and the speculator, the politician and the trader, the vulgar and the cultivated—all mingle in the sphere of her daily life. Having no housekeeping to attend to, time hangs heavily on her hands; she loiters in the drawing-room, and chats on the stair-case; she dresses elaborately for strangers' eyes; partly from curiosity, and partly from *ennui*, she meets half-way advances to an acquaintance, and before the winter is over, is on familiar terms with scores of people, of whose antecedents she knows nothing, and whose companionship fritters away her time, and begets a love of admiration, which finally becomes as requisite an excitement as alcohol to the inebriate. This feeling grows less and less fastidious, and exacts more in quantity than quality; emulation feeds it. To outdo the others of her sex in the house, and collect the largest circle, or retain the greatest beau, is the goal of her ambition. She soon forgets how to blush, and learns to talk loud, loses all charm for the refined and intelligent, and prides herself upon being *fast*. When some country cousin or early friend meets her unexpectedly, it is difficult to believe she is the same person known of yore, so completely is the down rubbed off the peach, so wholly is the original interest of character evaporated. To unsex a sweet and modest girl, there is no quicker process than unmodified hotel life in Gotham. The picture, however, must be seen and studied to be appreciated.

DOMESTIC RECEIPTS.

Raspberry Jam.—Pass the raspberries through a fine sieve to extract their seeds, add to them their weight in fine, white sugar, and boil them, and stir them over the fire until you can just see the bottom of the stew-pan.

Blackberry Jam.—Boil the blackberries with half their weight of coarse moist sugar for three quarters of an hour, keeping the mass stirred constantly. A stew-pan is not a necessary vehicle; the commonest tin sauce-pan will answer the purpose equally well. The cheapness of this homely delicacy, besides its sanative properties, renders it peculiarly desirable for scantily furnished tables. If the berries be gathered in wet weather, an hour will not be too long a time to boil them.

Gooseberry Jam.—Pick and clean red gooseberries, thoroughly ripe. Boil them by themselves for twenty minutes, skimming them frequently. Then add brown sugar, in the proportion of one pound of sugar to one pound of fruit. Boil for half an hour after the sugar is in. Skim it, and pour it into earthenware jars. When cold, paper up the jars, and set aside in a dry cool situation. Strawberry, and black currant jams, are made in precisely the manner as the above; but instead of brown use lump sugar.

Self-Sealing Fruit Cans.—Take a common fruit jar, with a tin cover, made like a shoe-black box. The jar and the cover will probably cost a dime, and hold a quart. Any of the cements that are used for sealing cans or jars will do for this. Heat your fruit, either in the jars, or in some other vessel, and pour it in the jar, (previously warming them.) Now pour enough cement in the cover to give the bottom and side a tin coat. When the cement becomes slightly stiff, apply the cover over the jar, the jar having been well filled, and turn the jar *upside down; and here is the invention.* As fruit jars have a lip, you now have a little trough to fill with cement, and the work is done. Let your jars get cold *standing on the covers, and put them away in the same position.*

It is the steam escaping in the common way of sealing or soldering cans, that leaves so many of them imperfect. My plan entirely obviates this difficulty, as the steam or vapor is always on top of the fruit. This arrangement, you perceive, is really a chemist's *pneumatic trough*, and there is no danger when your fruit has cooled down and created a vacuum, that the external atmospheric pressure will *force the corks in.*—*Cor. Ohio Cultivator.*